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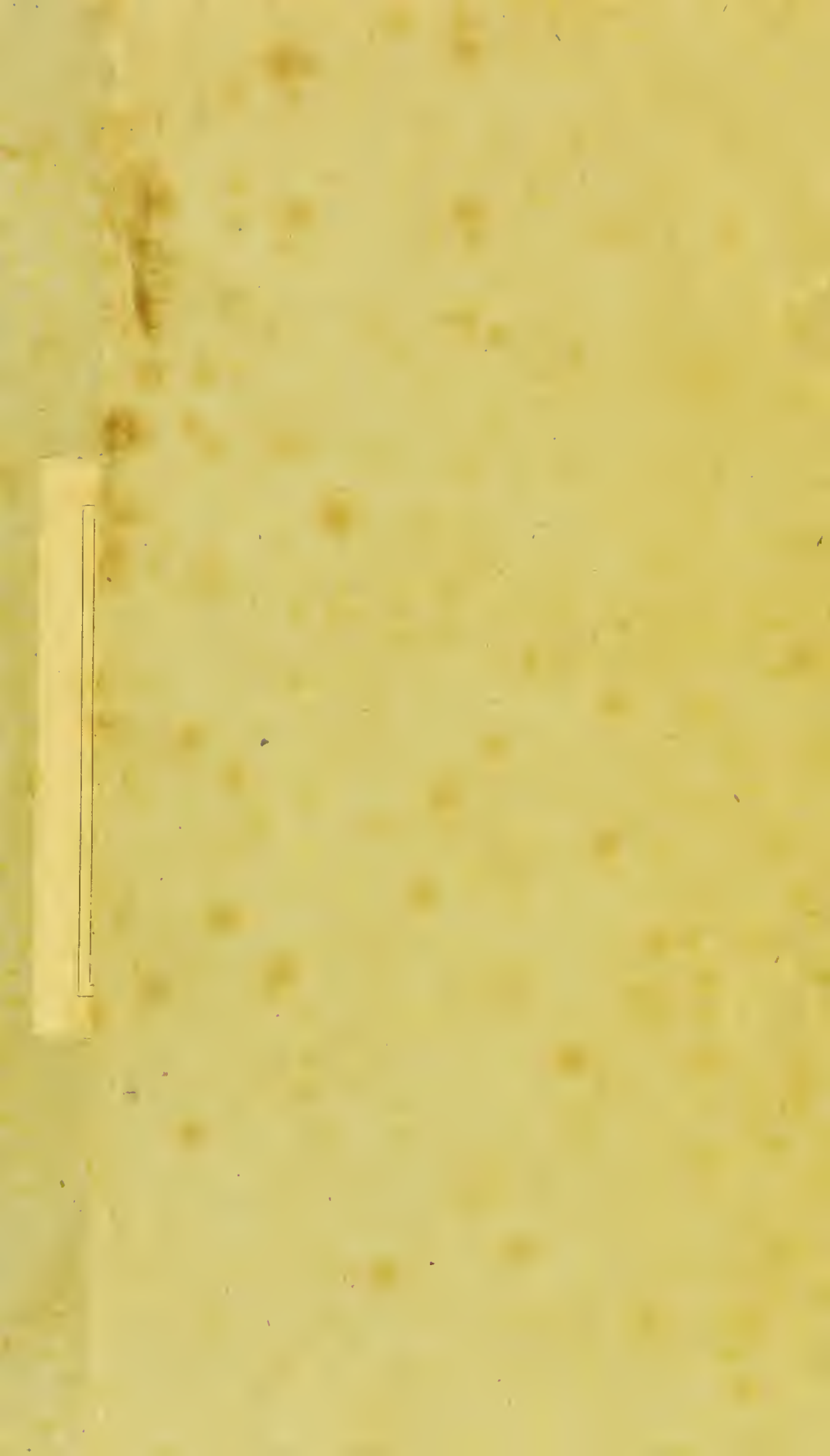
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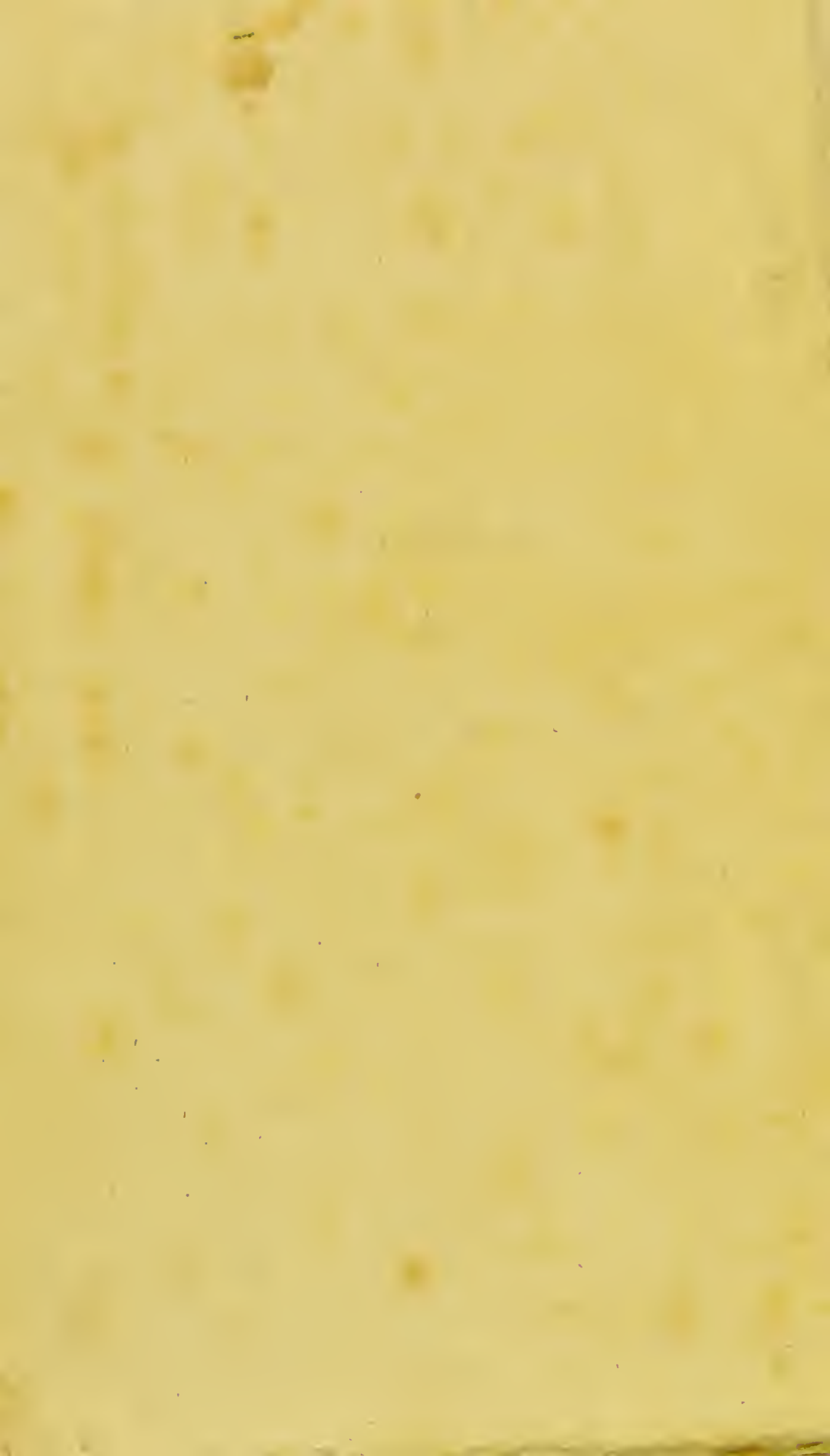
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MEMOIRS  
OF  
MEDICINE, &c.



MEMOIRS  
OF  
MEDICINE;

INCLUDING A SKETCH OF  
*MEDICAL HISTORY,*

FROM  
THE EARLIEST ACCOUNTS  
TO  
THE EIGHTEENTH CENTURY.

---

BY RICHARD WALKER, Esq.

APOTHECARY TO THE PRINCE OF WALES.

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MAY 1, 1799.





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## P R E F A C E.

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THE history of general knowledge, in all ages and countries of the world, sufficiently demonstrates the gradual manner, in which acquisitions the most important to human happiness have been made.

But no branch of this knowledge affords greater evidence of slow progress, than the art of healing diseases, which, though nearly coeval with the existence of mankind, has never resisted the best directed efforts of human wisdom, struggling with it toward the goal of perfection in vain.

As

As, however, the utility of a science cannot be controverted merely on the score of invincible defect, or partial uncertainty, neither reason nor common sense will require arguments to prove, that, notwithstanding this imperfection of medicine, the infirmities, to which human bodies are subject, demand all the remedies, that human ingenuity can supply.

To death, and the dissolution of organised matter, no effectual barrier can be opposed. But if the painful symptoms or final event of this tendency can be alleviated or delayed, it is no presumption, to reckon the study, which aims at such purposes, amongst the best and most useful employments of intellectual faculties.

That natural sentiment and unbiaſſed opinion have ever accorded with this representation, the universal records of suffering humanity



humanity will testify. For in the earliest ages, proficient in this art were respected as divinities, and the diadem of royalty gained much of its lustre from the laurel of primitive healing. And when its practitioners, in succeeding times, corrupted by artificial modes of thinking, sank far below the dignity of their occupation, it was still regarded by the sages of the world, as the most sublime of human sciences.

Nor have the vices or vanity of its professors in later days, aided by vulgar prejudice, and the sophistical jealousy of learning, eventually obscured its intrinsic excellence, or succeeded in reducing to any inferior standard the character of a truly great physician, which, in addition to talents of the highest order, includes the moral qualities, that constitute the essence of social virtue.

Descending

Descending from this consideration of the native dignity of medicine to that of its present condition in this country, it is to be lamented, that any of those, intrusted with the important care of public health, should be ignorant of the origin and progress of the art, in which they are engaged. If to practitioners of such a description be added all learners, wanting means of better information, with others less immediately concerned, whose laudable curiosity can be gratified, by tracing in the general outline of such a science many fluctuating operations of the human mind, there will be no inconsiderable number, to whom a slight and cursory review of the subject may be more acceptable, than a circumstantial and learned detail.

To supply the want of an English compendium, calculated for their use, and adapted to modern taste, the following sum-

mary

mary of principal occurrences is offered, in hopes of being sheltered by the humility of it's pretensions from the severity of critical censure. In alleviation of the great and obvious defects of such a composition, must be pleaded the circumstances of it's selection, for the original purpose of assisting a treacherous memory, from the multifarious results of desultory reading, amidst the constant and pressing avocations of a fatiguing employment.

The trifling notice taken of superstitious practice, or of fabulous and equivocal accounts, will need little apology at this day. But in excuse for the omission of authorities, so necessary to the confirmation of historical writing, it may be observed, that an abridgement of this kind scarcely admits any thing, which has not been allowed by common consent. The advantages of brevity have therefore been consulted in this respect, as  
well

well as in many inferior matters, relating to etymological accuracy, chronological order, and any general explanation of scientific or technical terms, which may be found in the medical vocabularies of our language.

MEMOIRS OF MEDICINE, &c.

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B O O K I.

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A REVIEW OF MEDICINE,

AS IT WAS PRACTISED BY THE MOST ANCIENT NATIONS,

AND ESPECIALLY AMONGST THE GREEKS.

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## B O O K I.

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### CHAP. I.

THE MOST ANCIENT ACCOUNTS OF MEDICINE,  
PRIOR TO THAT OF THE GREEKS.

**I**N the primitive days of the world, though some nations may have existed without physicians, none appear to have been without remedies: for notwithstanding all the advantages of temperance, and exemption from hereditary diseases, mankind must have ever been exposed to injuries and pain from outward accidents, if not from internal causes. It is difficult, therefore, to conceive any period of time, when means of relief in such cases were not objects of instinctive research.

From the first rude effects of this natural impulse, the most ancient authors deduce

the origin of Medicine. The Babylonians, says Herodotus, the father of history, were accustomed to place their sick in the streets and highways, that passengers might see and inform them of any remedies, that had been successful in similar complaints. The same custom has been ascribed to other countries, though it is probable the healing art did not long continue in so rude a state.

But prior to historical monuments, the most authentic chronology warrants the supposition of it's being first practised systematically in India, where human science still exhibits the most characteristic marks of remote antiquity.

A transition thence to China, brings us acquainted with the oldest medical records of the world, which ascribe to the reputed founder of the Chinese Monarchy several books on the virtues of plants, and prognostics of diseases from the state of the pulse, at least two thousand years before any knowledge of the pulse can be traced in the records of any other nation. Of such writings, there may indeed be ground for disputing  
about

about the real author, though their great antiquity cannot be doubted, if the high claims of this extraordinary people to priority of civilization be generally allowed. The present and almost exclusive attachment of the Chinese physicians to this copious spring of medical information, may be noticed amongst other signs of the stationary condition of their general knowledge.

It would be out of place to enter into the conjectures of the learned respecting the prime sources, and particular channels, which supplied and conveyed the first streams of science from east to west. Our medicine can be traced no farther back than into Egypt, and even there all its remaining vestiges are obscured by fable, or clouded with all the absurdities that veil the general face of Egyptian wisdom. It retains indeed, even to this day, some stains of impurity from the admixture of Egyptian divination, magic, and astrology, which betray their origin no less clearly than the incantations and talismans of the first ages, or the phylacteries and alexipharmic nonsense of intermediate times.

As a principal branch of study and practice amongst the priests of Egypt, it doubtless contributed, with their exclusive assumption of other parts of knowledge, and their usurpation of all political power, to their high elevation above the vulgar.

Amongst the crowd raised to eminence by such means, Egyptian tradition has transmitted many names, celebrated for pre-eminence in the healing art. Leaving, however, the Antiquary to determine the claims and distinctions of Isis, Osiris, Apis, and Serapis, it will be sufficient to mention Thoth, better known under his Greek appellation of Hermes, as one of the most important personages in the primitive catalogue of it's votaries. In addition to his great medical skill, this sage was indeed gifted, by the superstition of many ages, with profound and unequalled judgment in all the depths of learning and knowledge: but the most prominent feature of his greatness is visible in his ancient establishment as the god and patron of the chymical art, though without any existing proof of his having been acquainted with qualities of bodies, discoverable

discoverable only by chymical means. Yet, whatever might be the real state of his acquirements, it would be great injustice to disgrace him as the source of all the mysterious jargon, which has deluged the world under the name of Hermetic Science.

To Hermes has been attributed a code of medical practice, from which it has been said no physician in Egypt was allowed to deviate, without incurring the guilt and punishment of murder, if he failed of success. Yet Hermes, by some Antiquaries, has been thought an allegorical person; whilst others have confounded him with Noah, or his grandson Canaan, with the Indian Bacchus, the Persian Zoroaster, and even the Jewish Prophet Moses.

The uncertainty of Egyptian history, which has afforded the most fruitful field of learned conjecture, yields indeed no barren amusement to the medical Antiquary, who, besides the stories of Hermes, may trace the pedigree of Apollo himself from Horus, another renowned physician of ancient Egypt, or examine the grounds for supposing the



Esculapius of Greece to be the same with the Esculapius of this country, whose merits raised him to equal rank, as the God and Sovereign of medicine.

The credit which has been given to the anatomical skill of the Egyptians, on the score of their mummies, and their modes of embalming, seems not much better founded than the presumption of their architectural skill, drawn from those massy remains of their power, the Pyramids. But the art of enveloping in bituminous matter a dead carcase, or a bony skeleton, to prevent the total separation of their parts, as little resembles any scientific examination of the human body, as the custom of perpetuating the memory of some great person, or singular event, by a vast heap of stones, resembles the taste which gives symmetry and proportion to the edifices of Greece and Rome. Besides, it would be difficult to reconcile any anatomical pursuits with the known religious prejudices of the Egyptians, which made them shudder at the defiling touch of death, and regard with a degree  
of



of sacrilegious horror, even those whom they employed in the office of embalming.

In the history of the Jews, little is found relating to the ancient state of medicine, beyond the honourable estimation in which it was held by them, in conformity to the repeated injunctions of their divine law. The knowledge which enabled Moses to pulverize that object of their idolatry, the Golden Calf, and qualified Solomon to allegorize the ravages of age over the human frame, have been adduced as presumptive evidence of some progress in chymical and anatomical subjects. To inferences from such evidence, any philosophical inquirer will doubtless yield that degree of assent which they deserve.

## CHAP. II.

ON GRECIAN MEDICINE, BEFORE THE TIME OF  
HIPPOCRATES.

PASSING from the obscurity of Egyptian annals, to the clearer records of Grecian science, appears like a transition from night to day. This contrast has been thought sufficient to baffle those speculations, which have attempted to prove an intimate union between these two nations, and establish a chronology, that represents Egyptian Sages as the immediate teachers of the philosophers of Greece.

In a work of this kind, it is unnecessary to speak of the extraordinary and singular energy of character, with which these latter impressed their countrymen, and elevated them into models for succeeding ages. But our peculiar subject compels us to observe the comparative purity of that light, which illustrates their most ancient stories and fictions, relating to the primitive state of their medicine.

Thus

Thus reason and reflection influenced the shepherd Melampus, that oldest physician of Grecian name, when he gave hellebore to the frantic daughters of King Prætus, after observing it's effect on his bounding goats. The liberal remuneration of his skill by one of his royal patients in marriage, with a third of her father's kingdom for a dowry, may be mentioned both as an indication of the simple manners of ancient days, and a proof of the early and high estimation of the healing art. His prescription of steel infused in wine for the impotence of Iphiclus, one of the Argonauts, is another decisive evidence of progress in rational medicine.

Similar proofs may be collected from the surgical operations of the Centaur Chiron; whose dexterity in treating outward diseases, both in men and horses, probably gave rise to the romantic fables of his history.

His use of natural remedies appears from various accounts of his practice, and especially from the frequent mention of his skill in the medical virtues of plants and minerals,  
such

such as the centaury, which he applied to his own wound, and verdigris, of which he taught the use to his pupil Achilles, the scrapings of whose brazen lance, according to Homer, were scattered with such good effect on the sores of Telephus.

If the dignity or utility of medicine needed such confirmation, the catalogue of it's early votaries might here be enriched with many illustrious heroes, who crowded for instruction to the Centaur's cave, at the foot of Pelion. But leaving more equivocal names, that of Esculapius demands particular attention.

This great father of our art is said to have been engaged in the Argonautic expedition, the first recorded enterprize of the Grecian chiefs in union. But the vanity of attempting to ascertain or elucidate his person and character, appears sufficiently in the doubtful conclusions of learned inquirers, some of which have extended to the reality of his existence. Curiosity must therefore be satisfied with conjecturing, that he was probably one of the first sages, who dedicated  
himself

himself wholly to the study and practice of healing.

Presumptive evidence of dexterity and good fortune in this occupation, appears in the consent of all antiquity to regard Esculapius as the patron and god of medicine, to whom the supreme power had delegated unlimited authority over the springs of life and death. To confirm the opinion of his extraordinary success, we have likewise the fable of his bodily death, which represents Jupiter yielding him up to the jealousy of Pluto, indignant at the skill which threatened the depopulation of his ghostly domains.

The admirers of antiquity will expect some mention of those emblems, the serpent, cock, and knotted stick, which ever accompanied the representations of Esculapius, and which have been generally regarded as typical of the difficulties of his art, and the vigilance and cunning which it requires. That most important of them, the serpent, which might probably be intended to indicate his renovating power, was chosen to figure him out as the parent of immortality,  
in



in the constellation Serpentarius, to which he was translated by his father Apollo, whose sanative power appears to have been one of the earliest objects of human faith upon record.

It would be superfluous to dwell on the extensive veneration of the Pagan world for this favourite deity. The magnificence of the temples erected by the Greeks to his honour, and especially that of Epidaurus, has been noticed by a multitude of ancient historians. In these sacred edifices began the useful custom of suspending tablets, on which were inscribed the remedies which had been successful in various disorders, under the pretended direction of the Oracle, and the artful management of its priests. Of these tablets we have some examples, which, though discovered in another place, and at a much later period, may be mentioned here, as not inapplicable to illustrate our subject.

In one piece of marble, thanks are returned to the god for a cure of pain in the side, by the application of hot embers from his altar, mixed with wine. In another, for  
spitting

spitting of blood, cured by eating feeds or cones of pine roasted in the sacred fire, and taken with honey. A third records the success of a collyrium made of honey and the blood of a white cock, in a disease of the eyes.

The truth of history obliges us to add, that the honour of no ancient deity was more sullied by the conduct of his priests than that of Esculapius. But this may easily be accounted for, by recollecting the extraordinary occasions furnished by the infirmities of mankind, for the greatest abuse of public confidence. In the more enlightened days of Greece, these abuses became notorious subjects of reproach, as appears from the scenic representations of that satyric poet Aristophanes. The story of Dionysius, the Sicilian tyrant, cutting off the golden beard of his statue at Epidaurus, as an unseemly reproof to the smooth chin of his father Apollo, may be mentioned as another symptom of declining veneration for this most famous of medical oracles.

The introduction of allegorical personages to swell the trains of Pagan divinities, seems

to have been a custom of very ancient date. Nor was it uncommon for these attendants of state, by gradually engrossing some delegated and inferior office, to get at length a considerable share in the chief honours and power of their principal ; such at least was the case with the fabled offspring of Esculapius, Panacea, and *Ægle*, but more especially their sister the nymph *Hygeia*, the poetic goddess of health, who has long supplanted her father in the dignity and supremacy of his sanative powers,

The descent from Esculapius to his sons Machaon and Podalirius, immortalized by Homer, seems like a step from some aerial height to the firm tread of earth. After acknowledging the uncertainties of the father's story, it would be useless to enquire whether these princes ought to be regarded as his natural or professional children. We cannot, however, omit the opportunity of noticing the high rank which the practitioners of the healing art maintained in the most heroic ages of the world. For though the poet's regard to nature does not permit him to elevate their characters by supernatural attributes,



butes, he betrays no idea of their being degraded from the first order of princes by their daily care of the wounded soldiers. Nor can these evidences of manly and unbiassed sentiment be invalidated by the different modes of thinking, which have prevailed in times further removed from the influence of simplicity and truth.

During the long period of seven centuries, from the Trojan to the Peloponnesian war, the annals of Greece afford no other memorials of medicine, than a casual mention of the Asclepiades, an hereditary tribe of physicians, so denominated as the traditional offspring of Esculapius, in conformity to the custom, which often transferred and perpetuated the name of an illustrious progenitor to his most remote descendants. Some individuals of this family, which probably monopolized the profession, founded those schools in the islands of Rhodes, Cnidos, and Cos, where the custom of recording the success of medical practice on durable monuments of brass or stone laid the best possible foundation for permanent improvements.

C

Though

Though crude theory was ill calculated to advance a practical science, yet the philosophy of the ancient Greeks had necessarily considerable influence on their medicine.

Pythagoras, who may be called the parent of this philosophy, contributed but little to it's improvement by his reveries about generation, and the connexion between body and mind: nor was any great or practical advantage gained by his celebrated doctrine of climacterics, in which he applied his harmonic scale of numbers to analogous divisions of man's age, portending extraordinary changes and revolutions in the human body.

But amongst those educated in the wholesome precepts, and severe institutes, of the Pythagorean School, established at Crotona, (one of the earliest and most numerous colonies of Greece on the coast of Italy) the names of Alcmaëon and Democedes claim particular mention in the annals of medicine. The former, who has been honoured as the inventor of moral apologues, was a  
 4 practitioner

practitioner of great fame, and has been reputed the first who ventured to amputate a limb to save the life of his patient. The story of Democedes, during his captivity at the Court of Persia, curing both the elder Darius and his Queen Atossa, whom their Egyptian physicians had treated in vain, proves likewise the progress of our art amongst the Grecians, long before the political consequence of Athens and Lacedæmon was acknowledged by the civilized world.

An extraordinary specimen of the liberal rewards given to medical skill in those early days occurs in the history of the same Democedes, who received from the Athenians an annual salary of one hundred minæ, another of a talent from the people of Ægina, and a third of two talents from Polycrates, the tyrant of Samos, amounting together to a thousand pounds of English money, an immense sum in those days, when the pay of an Ambassador did not exceed two drachms a day, or about twenty-three pounds in a year.

The well-known dissections of Democritus, the philosopher of Abdera, furnish the most ancient and authentic example of anatomical investigation, undertaken with the express view of discovering the structure of the animal frame. With the salutary influence of this practice, the prudential scepticism of his contemporaries, Acron and Herodicus, not only combined to restrain that licentious theory, which an untempered spirit of philosophising had already introduced into medicine; but also to recommend a moderation in practice, which an early and indiscriminate use of violent remedies had made very necessary.

To what has been said of medical substances, must be added, the supposition of opium being well known to the ancient Greeks. The *Nepenthes*, with which Helen treated the guests of her husband Menelaus, was probably the true Thebaic extract, as appears both from it's immediate effects, and the accounts which Homer gives of her procuring it from Egypt, of which Thebes was then the principal city.

To

To assert their profound ignorance of chymistry, may be no compliment to the surviving admirers of occult science, whose predecessors have been indefatigable in their endeavours, to find some memorial of it's existence amongst this enlightened people.



## C H A P. III.

## OF HIPPOCRATES.

THE appearance of Hippocrates, in the medical firmament, is that of a great luminary suddenly dispersing the shades of obscurity and doubt.

He was born in the island of Cos, at the beginning of the 80th Olympiad, 460 years before the commencement of the Christian æra. His father Heraclides was reputed to be the seventeenth lineal descendant from Esculapius, and his mother Phenerate the eighteenth from Hercules. The fame of such ancestry must have had the influence of hereditary attachment, and accounts for his early and entire dedication to the practice of the art, which he was destined to refine and improve. His first medical instructions, after those of his father, he received from Herodicus before mentioned, and he was tutored in general science and philosophy by Gorgias, a celebrated sophist, and an orator of renown.

The

The exercise of his profession, agreeably to the custom of the age, led him from place to place, so that he is reported to have visited every city of Greece, and to have travelled over the greatest part of Asia Minor in a medical capacity. His stay, however, must have been often considerably protracted, as appears from his long attendance on many tedious diseases, of which his works so accurately describe the progress.

At Larissa, the chief town of Thessaly, where he spent much time, and composed several books, Hippocrates ended his useful and honourable life at a very advanced age. Besides two sons, Thessalus and Draco, he left a daughter married to his favourite pupil Polybius, who arranged and published the works of his great master.

The general history of science affords sufficient evidence of the high estimation in which this primitive physician has been held in all ages, and almost in all countries of the world. In his life-time, the honours conferred upon him by public consent and sovereign munificence exceeded those, that



have distinguished the merit of any other individual. Nor has there ever been a period, when even they, who disputed his professional authority, omitted their tribute of praise to the dignified simplicity and benevolence of his general character.

A steady and persevering zeal for the honour and improvement of the profession which he followed, is a strong feature in the history of Hippocrates. Indeed the qualifications and duties it requires have never been more fully exemplified than in his conduct, nor more eloquently described than by his pen. Of this eloquence, his first nervous aphorism relating to the subject, presents one of the most perfect and concise proofs within the compass of human language, where he expresses in few words, that

“ The brevity of human life is insufficient  
 “ for the full consideration and thorough  
 “ knowledge of a science like medicine,  
 “ which admits even the evidences of long  
 “ and hazardous experience with diffidence  
 “ and caution, and adds to great inherent  
 “ difficulties, the necessity of attending to  
 “ many

“ many external duties and observances,  
 “ relative to those concerned in its suc-  
 “ cess.”

His custom of admitting none to his instructions, without the solemn introduction of an oath, enforcing not only the utmost exertions for it's advancement, but a rigid attention to the morality of private life, strongly evinces his persuasion of it's importance to society at large. But the most estimable part of his professional character constitutes a compleat model of artless simplicity, superior to the speculating fashion of his age. For though possessed of all the learning, and skilled in the various philosophy of Greece, he scorned the subtilities of that theory, which might withdraw attention from nature, whom he closely observed, and whose dictates he followed with the most scrupulous humility.

The works of Hippocrates are to be regarded both as registers of public experience and individual observation. But the aggregate of medical knowledge, transmitted from his predecessors, he had the skill to arrange  
 and

and intermix with his own matter in so consistent and uniform a style, that no elementary work of the same date ever surpassed. The miscellaneous subjects of a conjectural art could not indeed be disposed with all the precision and elegance of Aristotle's poetics, or the sublime morality of Plato. Nor would it be reasonable, in the infancy of such an art, to expect that attention to order and method in writing, which succeeding improvements have rendered so much more easy and obvious. Yet with all the defects that can possibly be found in this author, compared with the most enlightened of his followers, he must ever remain an unrivalled example of honest and useful industry, which should rouse the blush of shame in those indolent cavillers, who censure his patient prolixity, and oppose their own concise and ephemeral systems to the extensive and ample bounds of his practice.

The many books ascribed to Hippocrates have been published, translated, and commented upon, in almost every language of the universe. In so ancient and numerous a catalogue, it is not surprising, that disputes  
have

have arisen concerning their general authenticity. Suffice it to observe, that his Aphorisms, Coan Prognostics, and Essays on Epidemic diseases, contain the summary of the rest, and bear the strongest marks of originality. By connecting, therefore, their promiscuous contents on physiological and pathological subjects with the general therapeutic rules which they contain, the most satisfactory view of his doctrines and practice may be obtained.

Such an abridged consideration will indeed be far from exhibiting a just view of the practical excellence of the original, and may be thought to exceed the apparent and more amusing scope of brief narration. But it will serve to preclude the future necessity of general reference to the particulars of ancient medicine, which continued for many ages nearly the precise and identical medicine of Hippocrates.

## CHAP. IV.

## OF THE ANATOMY, PHYSIOLOGY, AND PATHOLOGICAL SKILL OF HIPPOCRATES.

IN that conscious power, capable of directing every thing necessary to the preservation of life and health, which Hippocrates supposed to be always present in the animal frame, we have not only the *vis medicatrix naturæ* of all medical systems, but the prototype of that first principle of vital functions, distinguished by succeeding theorists with variety of names. The mode likewise which he assigns to it, of operating by an instinctive attraction or repulsion, of similar or dissimilar parts, has been copied without any essential difference of terms in the speculations of the most enlightened naturalists. But the evolution of his physiological opinions will appear by a cursory examination of his anatomical notions, for the imperfection of which, the scanty sources of his information sufficiently account.

As



As it is presumed, that he never dissected a human body for the purposes of anatomical investigation, his knowledge of the internal organs could only be derived from accident, or a comparison with those of other animals: And here, prior to the consideration of particulars, it must be premised, that the crudity and apparent absurdities of theory, grounded on this new and uncertain foundation, cannot be considered as matter of reproach, or adequate causes of that contempt, with which some fastidious critics have treated this venerable author. Such injustice, indeed, ought to have been obviated by the recollection of his industrious discriminations of disease, and careful attention to the most proper objects of practice, were not common candour sufficient to excuse deficiencies, inseparable from the age and circumstances, and consequently foreign to the personal character of Hippocrates.

His anatomical language refers in general to Solids and Fluids, under the name of parts *containing*, and parts *contained*. In treating of the former, he represents the  
 brain

brain as a receptacle for redundant moisture, and a condenser of hot and swelling vapours, which it discharges again in defluxions and catarrhs. Nor does he ever appear to have suspected it's connexion with sensibility and feeling; describing even the optic nerve immediately proceeding from it, as a mere canal, through which the aqueous humour is distilled into the eye. He is likewise far from considering the brain as the peculiar seat of the soul, or thinking faculty, which he places indiscriminately in the heart, diaphragm, and other parts.

From similar sponginess of structure he was induced to attribute the same office of absorbing superfluous fluid to the lungs, though he did not overlook their obvious use in conveying external air to moderate inward heat, and supply the blood with some new principle.

On the anatomy of the heart, Hippocrates bestowed great attention. But he regarded it merely as the organ for mixing with the blood some aerial principle, drawn from the lungs by it's auricles, which he describes as  
inflaters,



inflaters, or bellows, peculiarly calculated for that purpose. The great vessels proceeding from it, he confounded with every thing resembling cords, such as nerves, tendons, and ligaments, ascribing to them all one common origin from the spinal marrow. Hence appears the improbability of his knowing any thing relating to the blood's real course, notwithstanding the strained interpretations that have been made, rather with a view of depriving later ages of the honour of this discovery, than out of real admiration for antiquity. Whatever, indeed, was known to the ancients on this subject, seems to have consisted in some general and loose idea of regurgitation, or a certain flux and reflux, barely sufficient to communicate such a concussion to the vessels, as might hinder the stagnation or congealing of their contents.

From the size and appearance of the liver, it is no wonder, that it should have been always regarded as the great organ of sanguification, before the blood's circuitous motion was understood. The materials for composing this vital fluid were, in the opinion  
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of Hippocrates, and indeed of all antiquity, brought to this great viscus by a general suction of the vessels communicating with the alimentary canal. He likewise attributed to the liver, as well as to all the other abdominal viscera, a faculty of generating heat, and thereby promoting the necessary dissolution of food.

To the obvious uses of the kidneys, Hippocrates added the supposition of the urinary secretion being assisted by transfusion into the bladder from the surrounding parts.

His physiology of generation indicates his imperfect knowledge of the organs concerned in that process. He had an extraordinary notion of the semen being prepared in the brain, and conveyed by the spinal marrow to the vessels provided for its reception.

He believed, likewise, in the loco-motive faculty of the uterus, in which he thought a fermentation of the male and female semen sufficient to cause an evolution of parts,

parts, agreeable to the preponderance of either.

The circumstances of embryo life engaged so much of his attention, that he composed a particular treatise on the difference between children born in the seventh and eighth months of pregnancy. But his sentiments on these subjects are to be received, both with allowance for his ignorance in minute anatomy, and the prejudices and credulity of the age in which he lived.

He had no accurate ideas of muscles, or of muscular motion, though he well knew the number, figure, and connexion of the bones.

Hippocrates divides the fluids, or parts contained, into the four humours of blood, phlegm, yellow and black bile. The first, conveying warmth and nourishment to the body, he reckons of a hot, moist, and sweet nature. To the second, which he calls cold, moist, white, and saltish, he as-

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signs

signs the office of lubricating such parts as are to be moved. He ascribes a stimulating and detergent quality to the dry, glutinous, fat, and bitter particles of the yellow bile; whilst he regards the last as a kind of fermenting leaven, or basis, from which all the former are produced.

As he makes health to consist in a due temperament and proportion of these humours, so he looks for the source of complaints in their excess, defect, or depravation. But his system includes a farther analogy, or connexion between the vices of these four humours, the four seasons of the year, and the four ages of man. Thus he imagines, a redundancy of blood, producing hot complaints, to prevail chiefly amongst young people, and in the spring of the year; bilious diseases in summer and middle age; melancholy, or predominance of black bile, in autumn; and the coldness and benumbing effects of viscid phlegm, both in the winter season, and the winter of human life.

The

The pathology of Hippocrates was very systematic with respect to the causes of disease, which he divided into external and internal. The former included whatever could affect the body outwardly, as air, exercise, rest, sleep, and watching; and the latter, those things capable of producing an inward influence, as meat, drink, secretions, retentions, and passions of the mind. In his observations on the air, winds, and seasons, he investigated the causes of many similar and epidemic affections, the history of which constitutes a very considerable and curious portion of his works. Nor did he overlook endemic ones, proceeding from peculiarity of soil, situation, and climate.

From such an author may be reasonably expected the natural division of distempers into acute and chronic. The former he confined to the term of fourteen days, and subdivided them into three stages, the beginning, increase, and termination, or crisis. The transition from the second to the last of these stages was the period in which he expected some indication from nature, by what outlet the morbid matter was to be

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expelled,



expelled; and this intention he was particularly careful not to interrupt, by exciting any other or contrary motion. When the crisis proved partial and incomplete, he still reckoned every change or new accident, attended with evacuations either from the skin or the intestines, critical in a degree, till the full concoction and expulsion of the humours was effected.

In fevers of the most acute kind, Hippocrates looked for a regular crisis on the fourth day; but in those less acute, on the seventh, eleventh, or fourteenth; after which the remainder of the disease was ranked amongst those of the chronic kind. In this state he waited for the twenty-first day, and afterwards counted every fourth remarkable, though not necessarily and absolutely critical. But through his whole system, the number seven, in all possible combinations and divisions, extending even to months and years, was regarded as the most certainly and finally judicial of all periods. He made allowance, however, for occasional exceptions to all these rules, and noticed the circumstances of some acute diseases terminating

nating without any regular or visible crisis at all. He likewise acknowledged frequent irregularities, by a translation of the offending matter from one part to another, which motion is still denominated, in his language, a *metastasis*.

The numerous exceptions furnished by experience to the uniform course of acute diseases, have been thought insurmountable objections to Hippocrates's theory of critical days. Nor can these, perhaps, be wholly obviated either on the supposition of physical changes, induced by difference of climate, habit, and time, or the general alteration occasioned by the interference of art.

But whatever may be thought on this subject, it seems impossible to point out a better foundation of diagnostic skill, than the method observed by this great master of the art, whose critical knowledge of symptoms enabled him not only to distinguish one disease from another, but to foresee almost all their possible changes and terminations. His care and condescension in noticing a multitude of signs, which are too generally over-



looked, and totally escape the eye of superficial observers, was no less singular than constant and exact. In a thousand little peculiarities of mind and body, position of the limbs, voluntary and involuntary motions, expressions of countenance, and the hourly variations of rapid diseases, he could discern indications of great consequence. But his most certain prognosis was founded on the nature of the secretions, and of the urinary and alvine discharges, the appearances of which supplied him with such rational grounds of judgment, as no succeeding examination has been able to impeach.

This account of his pathology cannot be concluded, without observing the uncertainty in which he has left posterity respecting his knowledge of the pulse, which many of his successors have made an almost universal criterion of disease. The pulsations, which he frequently describes, have been thought by some to allude merely to the general throbbings felt in acute or inflammatory complaints; whilst others have construed his expressions agreeably to a more precise and modern idea of the term. It does not, however,

however, appear, that he ever expected from it indications of the first consequence. His authority, therefore, cannot be quoted for enhancing the importance of a symptom, which, considered abstractedly, may lead to almost every species of practical mistake.

To the industry of Hippocrates the science is probably indebted for an account of all the diseases, which came under his inspection. Of the whole number, the greatest part are still characterised by the names invented or adopted by him, and not more than five or six of them appear to be extinguished or unknown.

## CHAP. V.

OF THE THERAPEUTICS, OR MEDICAL PRACTICE  
OF HIPPOCRATES.

FROM the general silence of Hippocrates, relating to the success of his remedies, it may be conjectured, that he thought a thorough knowledge of a disorder the most important step towards it's cure. It may likewise indicate the scepticism of long experience, which admits with hesitation general conclusions from particular cases: Yet he has not left us without documents sufficient for examples of his manner of treating most of the complaints he described.

The therapeutic medicine of antiquity always commenced, and often wholly consisted in the regulation of diet. On this subject, Hippocrates's rules first respect the preservation of health, and include many injunctions of moderation, with cautions against a regimen of such exactness and uniformity as may render the body unable

nable to bear any necessary or unforeseen change. They refer likewise to many strong gymnastic exercises used by his countrymen, as means of obviating the beginnings of disease.

In curative axioms, the copious minuteness of Hippocrates descends to the very extreme of tautology. Practitioners, however, can scarcely be too frequently reminded in his words, “That as contraries cure contraries, so evacuation is the remedy for repletion, and repletion for the loss sustained by evacuation; that deficiencies are to be supplied, and superfluities retrenched; that contraction and relaxation are to be treated with their opposites, and that fluids moving in improper courses are to be brought back into their own channels;” in the practical application of which simple maxims, the most useful part of medicine doubtless consists.

His reiterated observations on the powers of nature, and the wisdom of trusting to her efforts in preference to the hasty, violent, or uncertain assistance of art, are of the

the same practical importance, however superseeded by the officiousness of ignorant conceit. Nor is his prudent caution less remarkable, when he asserts, that though desperate disorders require desperate remedies, yet no experiment ought to be tried, where the prospect of advantage does not exceed that of certain risk.

In the regular and rigid application of dietetic rules, Hippocrates sought the first means of such addition, diminution, or opposition, as might assist nature in expelling or subduing the cause of disease.

In pursuing these subjects, the delicacy of modern feelings is appalled at the discipline of ancient practice, which in very acute diseases interdicted every kind of nutriment for the first three or four days, allowing only as much thin, weak drink as was sufficient to moisten the parched throat, which was often administered on a small sponge, to prevent the thirsty patient from swallowing too copious a draught.

During



During this period, it was intended to leave the active powers of the constitution at full liberty to drive out or change all morbid matter. But if this effect did not follow, or if the strength of the patient failed in the trial, a more plentiful dilution was then allowed, with a beverage composed of eight parts of water, one of honey, and one of vinegar, enriched occasionally with the juice of acid fruits, cooling herbs, or some weak sharp wine. This plan, when necessary, was generally continued till the fourteenth day, the reputed commencement of the chronic term, when a more substantial diet was allowed, though still without recourse to any medicine, except gentle emetics and laxatives, the former consisting generally of a decoction of hyssop with salt and vinegar, and the latter of expressed juice or decoction of common cabbage, or the herb mercury, or the more pleasant exhibition of whey, a little salted. For the same purpose, mild suppositories were in common use, and clysters of sea-water, or of vetches boiled in milk with a little salt.

When



When more powerful remedies became necessary, ancient medicine had the choice of some of the most active purgatives hitherto discovered in the vegetable world. Amongst these, black and white hellebore, elaterium, colocynth and scammony held the first place, and frequently followed each other in quick succession. But they were never administered without special regard to the strength of the patient, and often to the season of the year and particular state of the weather; nor were they ever prescribed to children, old people, or pregnant women.

A belief in the specific virtue of some drastic drugs, attracting and expelling humours peculiarly vitiated, has ever been one of the chief prejudices of medical practice. The long established character of hellebore, for cleansing the body from those impurities, which have been supposed to occasion various degrees of mental obscurity and derangement, may be reckoned amongst the most singular fallacies of this kind, which the experience of past ages has scarcely been able to destroy. Anticyra, however, the  
place

place once so famous for it's growth, is now only remembered in the pages of classical and poetical allusion.

Returning to the practice of Hippocrates, besides the powerful medicines employed by him to procure internal discharges, we have to notice his general methods of promoting other evacuations, which, though simple, were not less effectual. To cause perspiration, he used every external means of increasing heat, such as warming the room, covering the patient, pouring hot water on the head and limbs, with a free internal use of heated liquors, and often of pure wine. To increase the secretion of urine, he gave garlic, cucumbers, melons, celery, fennel, and other strong flavoured herbs, and even cantharides mixed with honey and wine.

But of all important remedies, his greatest was bleeding, an operation, the invention and first use of which is concealed in the obscurity of primitive times. In extreme cases of pain or inflammation, it was his custom to open at once the

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veins

veins of both arms, and let the blood flow till the patient fainted. He often likewise drew blood copiously from the legs and feet, to relieve complaints of the head and upper parts of the body, by large and deep incisions made with a common scalpel, and covered with copper or other metallic vessels exhausted of their air by fire, resembling both in contrivance and intention the cupping glasses of our own times.

In obstinate chronic cases, these local bleedings were commonly succeeded by the actual cautery, which produced such large and long continued discharges from the heads, necks, breasts, sides, bellies and limbs of his patients, as could not fail of considerable effect. Nor did he even spare their bones, which he burnt, sawed and perforated without scruple, in conformity to his famous maxim, “that in outward diseases the knife must be followed by fire, the last and most certain of all remedies.” But proofs even of greater severity appear in his directions to use the trepan itself for violent head-achs, and to force irritating substances into the windpipe in complaints of the  
lungs,

lungs, with a view of procuring, by some great effort, the discharge of the offending matter.

In diseases peculiar to women, his theory respecting the locomotive faculty of the uterus suggested most of his appropriate remedies, the supposed action of which the recollection of that theory will be sufficient to explain.

Narcotics were the only ancient medicines, in the use of which he seems to have been particularly cautious. Indeed the little he has said on the subject has made it a matter of doubt, whether he ever used opium, that most potent and useful of the whole class.

Beyond what is implied in the preceding account of his operations, the surgical practice of Hippocrates may be inferred from his rational directions for the treatment of fractures and dislocations, and the frequent cautions he gives respecting the danger and difficulty attending wounds and bruises in nervous or tendinous parts.

A catalogue

A catalogue of his external remedies, consisting of lead, copper, vitriol, alum, and nitre, which constitute the most powerful of any yet discovered, except those of chymical combination, sufficiently indicate a considerable degree of past experience in manual medicine. Of this progress a singular proof is likewise afforded, by his repeated injunctions to his disciples, to forbear the operation of lithotomy, which he thought of sufficient importance, to require the peculiar dexterity of a hand accustomed to no other professional exercise.



## C H A P. VI.

OF ARISTOTLE.

THE age of Hippocrates is dignified in the literary annals of the world as the æra, when the boundaries of human science were enlarged far beyond their former limits. Amongst that constellation of sages who contributed to this extension, the history and theory of animal life was necessarily a considerable object of curiosity and contemplation. It is therefore no wonder, to find the physiology of the human body, blended with the refined and abstruse doctrine of the academic philosophy, and forming a principal object in the experimental disquisitions of the peripatetic sect. It's mysteries were not, indeed, much elucidated by Plato's system of ideas, or his doctrines of intelligence, and invincible agency. But the more solid studies of Aristotle had a direct tendency to it's improvement, and were particularly calculated



lated both to refine and augment the accumulated stores of ancient medicine.

This prince of philosophers came into the world about the time when Hippocrates left it. By his father Nichomachus, physician to Philip of Macedon, he was destined to the profession of his own art. But the prudent determination of that monarch, in choosing him to be the tutor of young Alexander, fortunately enlarged his sphere to an extent, in which the active powers of the most universal genius on record could be more fully exerted.

Aristotle's original destination seems to have directed his ardent zeal for the knowledge of nature, to the particular improvement of medicine. For this purpose, he was furnished with uncommon advantages, by the munificence of his royal pupil, who conferred on him at one time a hundred talents (equal to fifty thousand pounds of English money) for the expence of dissections only. But it is to be lamented, that these dissections were confined, by the superstition of the times, to the bodies of animals,  
and

and were consequently inadequate to the full purpose of teaching the œconomy of the human frame.

Though the phyfiology of Ariftotle was generally conſonant to that of Hippocrates, his attention to many important ſubjects was much more particular and minute. From repeated and careful examinations of the heart, he concluded it to be the grand ſenſorium, communicating, by the endleſs ramifications of it's veſſels, ſenſibility to every part of the body. To the primary trunk of theſe veſſels he gave the name of aorta, in which he attributed the commencement of the blood's motion to a principle in nature that abhors a vacuum; which notion ſerved as the future baſis of many ſimilar ſpeculations on philoſophical ſubjects.

His compariſon of the meſenteric glands and veſſels to the roots and fibres of vegetables, ſucking their nourishment from the earth, can ſcarcely be improved as an illuſtration of animal digeſtion. That he had ſtudied this ſubject, both attentively and to good purpoſe, appears ſtill more evident, in

the division he made of the alimentary canal, and the names that he imposed on it's different portions, which continue to characterise them agreeably to their particular situation, their various structure, or the diversity of offices which they serve.

It cannot be matter of wonder, that this curious examiner of nature should have been particularly inquisitive into the organs, by which animal life is propagated without end; though it must be regretted, that he wasted so much time and labour in speculative contemplation on a process incomprehensible by human wisdom. But to make this or any other of his mistakes in the higher speculations of science matter of reproach, can proceed only from the pertness of that sceptic indolence, which has no title to the distinctions due either to intensity of thought, or industry of action.

And here the claims of gratitude will excuse the extrinsic defence of Aristotle, if not of his errors. For to what sage of antiquity has universal learning more extensive obligations, than to one exhibiting  
that

that rare combination of intellectual qualities, which unites the extremes of flow mechanic skill, patiently submitting to arrange every gross species of organized matter, with the subtle discernment, that almost instinctively comprehends it's more refined and complex modifications?

## C H A P. VII.

CONCLUDING MEMORIALS OF MEDICINE IN  
ANCIENT GREECE.

IN proceeding with our narrative, we meet with many circumstances, that indicate the high estimation, in which the art of healing ever continued in ancient Greece.

Both Philip and his son, who were ambitious of being ranked amongst the Greeks, shewed very peculiar regard to their physicians, as appeared in many instances, besides those of Aristotle and his father. But though the former prince never failed in due respect to the science, he was not blind to the artifice or vanity of it's professors, as is curiously evidenced in the story of Menecrates, who took the surname of Jupiter, and travelled about the country with a train of followers habited like inferior deities. When this most eminent of medical coxcombs arrived at the Macedonian court, he was treated with the  
most

most studied and ironical respect by the monarch, who ordered him to be fed in state, like an aerial deity, with the vapor of burning incense, whilst himself and his courtiers feasted at an inferior table on more substantial fare.

The history of Alexander affords a striking example of confidence in his physician Philip, the Acarnanian, when he swallowed the potion prepared by him, at the moment he gave into his hands the intelligence of it's containing poison. But this generosity was sadly contrasted by his crucifixion of the physician Glaucias, for not preserving the life of his favourite Hephestion.

As the general science of Greece continued to be improved by the disciples of the Stagyrte, we find them imitating their great master in attachment to medical studies. The first place amongst them is due to Theophrastus, the preserver and publisher of Aristotle's works, who wrote expressly on medicine. Menon, another of the Peripatetic school, composed a treatise, called the assembly of ancient Physicians, from



which many fragments of their histories have been transcribed by other writers.

As a public testimony to the honour of Grecian medicine at this period, stands that severe ordinance of the Locrians, which inflicted a capital punishment for disobedience to the orders of a physician. Of the same kind is the more moderate law of the Athenians, forbidding the practice of it to women and slaves, which was singularly suspended in behalf of Agnodice, a female of rank, whose passion for the art induced her to attend anatomical dissections, disguised in man's attire.

Of the rank maintained by individuals of the profession, we have instances in the respect paid to Theffalus, the son of Hippocrates, who lived long in honour and credit at the court of Archelaus, the most eminent of Alexander's successors in his paternal dominions, and in the power which the name-fake and grandson of that great father of medicine ever enjoyed in the service of Roxana, the wife and widow of that conqueror.

Diocles,

Diocles, the Carystian, was honoured the Athenians as a second Hippocrates: nor was the fame of Dexippus much inferior, who compelled a king of Caria to make peace with his countrymen, before he would undertake the cure of the sick princes his sons.

Of equal reputation were Prodicus and Praxagoras, the most eminent of the early disciples of Hippocrates, who contributed to extend the fame of their master over the civilized world. Their contemporary Ctesias, the Cnidian, was the favourite physician of several Persian monarchs, and distinguished himself by writing a history of that empire.

The poetical essay of Nicander, on the antidotal virtues of plants, has preserved his name in a sort of classical security from the ravages of time. Many others were eminent for superior skill, or peculiarity of practice, whose names it would be tedious to recite. Some indeed are remembered for different and less laudable reasons, such as Nicias, the attendant of Pyrrhus, king of Epirus, into Italy, whose treachery to his employer, whom

whom he offered to poison for a reward, was so strongly contrasted by the virtue of the Roman general, when he cautioned his enemy to withdraw his confidence from such a physician.

In anticipating the decline of Grecian science, which accompanied the decline of Grecian power and independence, it behoves us to acknowledge Greece as the country, where medicine not only received it's fundamental constitution, but much of the outward form and manners, which have characterised it in all succeeding times. Even it's best modern vocabularies, notwithstanding all the changes and additions it has suffered, contain little more than Greek terms and specifications, most of which were invented and applied in the best days of Greece.

## C H A P. VIII.

OF THE DISCOVERIES MADE BY ERASISTRATUS  
AND HEROPHILUS, RELATIVE TO THE BRAIN  
AND NERVES.

AMONGST the changes introduced into the political and civil state of the world, by the exploits of Alexander, some of the greatest consequence were produced by the munificent provision, which he made for the encouragement of learning in his favourite city of Alexandria. But of all establishments for this purpose, none appear to have been more efficacious, than those for teaching and improving the healing art. For in addition to the original and external advantages, which made Alexandria the resort of learned men from every part of the civilized world, this art was here emancipated from the shackles of superstition, which had so long restrained its advancement.

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The Ptolemies, who succeeded to the African division of Alexander's conquests, became the first patrons of rational anatomy, by granting permission to dissect human bodies after death. But their power was farther exerted, in surrendering living malefactors, as fit objects of anatomical examination.

Without discussing the policy or humanity of such a practice, we cannot but observe it's speedy good effects on the science, it was intended to improve. For we scarcely read of the medical school of Alexandria, before we are informed of the great and important discoveries of Erasistratus and Herophilus, two of it's earliest and most eminent professors.

It was probably the opportunity of viewing the actions of living parts, that gave these physicians the first ideas of a system of sensibility and power, depending on the brain and nerves, the true uses of which seem to have never been suspected by any of their predecessors.

In

In the theories of Hippocrates and Aristotle, we have seen the heart considered as the general sensorium, and it's vessels the organs for communicating it's influence over the whole body. But these more accurate observers placed the sentient principle on it's real throne, from which it is not likely to be precipitated by any future discovery.

The precise and specific degree of credit due to each individual of this great medical duumvirate cannot be ascertained, as they have been indiscriminately honoured on the occasion. Besides their minute and careful scrutiny into the brain and it's appendages, they are both celebrated for tracing the most extensive ramifications of the sanguiferous vessels, and elucidating by their dissections the nature of digestion, absorption, and some of the most material secretions of the body.

To Herophilus is particularly attributed the discovery of several minute and delicate parts, such as the arachnoid membrane of the brain, the retina and choroid tunic of  
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the eye, the prostate gland, and vesiculæ feminales. His doctrine of the pulse was so refined, that he is said to have calculated it's vibrations with a sort of geometrical nicety, and with some relation to the harmonic proportions of musical sound.

Of his wit and judgment we have a pleasing proof, in his treatment of Diodorus, a pedantic genius of those days. This quibbling philosopher, by a ridiculous abuse of logic, which has so often been pressed into the support of paradox and falsehood, pretended to deny the reality of motion by the sophistical argument, that no body can move, except in the place where it is, or in that where it is not, neither of which he allowed to be possible. When this ingenious sage applied for the relief of his dislocated arm, Herophilus satirically advised him to the comfortable application of his own theory, according to which the bone could not possibly be misplaced.

Erasistratus, who by his mother was descended from Aristotle, is well known  
for

for the wisdom and penetration displayed by him at the court of Seleucus, the Syrian monarch, in discovering the love of prince Antiochus for the young and beautiful Stratonice, his intended mother-in-law.

## C H A P. IX.

THE ORIGIN AND CONSEQUENCES OF THE DIS-  
PUTES BETWEEN THE DOGMATISTS AND EMPI-  
RICS OF ANTIQUITY.

DISCOVERIES like those of Herophilus and Erasistratus, which contradicted every established opinion on the important subject of animal sensation, could not fail both to lessen respect for ancient authority, and encourage a taste for new speculations. Thus we find the ordinary faith of physicians speedily changed into doubt, and veneration for names, converted into suspicion and contempt; whilst the human mind became inflamed with extravagant expectations from such great and unexpected novelties in the knowledge of nature.

The disappointment of these flattering ideas, serving to augment the general disgust occasioned by the broken connexion of former systems, laid the foundation for a scepticism in medicine, the effects of which are  
visible

visible in all succeeding periods of it's history. Displeased with the innocent and unavoidable mistakes of their theoretical masters, some of the most eminent and honest practitioners too hastily withdrew from them their whole confidence; and from an exalted sense of the preference due to experience, assumed a superiority over their dogmatizing brethren, whom they scornfully denominated the slaves of authority. These, on the other hand, eager to support the credit of their predecessors, undertook their defence, on grounds the least tenable, and scrupled even to acknowledge their obvious errors.

In this manner commenced those disputes between the medical dogmatists and empirics of antiquity, which in their progress, engaging the worst passions of humanity, became disgraceful to both parties, and have left a stain in the annals of medicine, which the moderation of succeeding times blushes to recollect.

But notwithstanding the virulence of these contests, in appreciating their mutual faults,

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there is no proof that the former were guilty of despising the uses of experience, or the latter of disregarding the dictates of reason and reflexion. Nor can those mischievous principles or practices be alleged against the original founders of empiricism, which their successors have made the refuge of ignorance and craft.

To the industry of ancient empirics we are indebted for the introduction, or rather for the full knowledge of sedative and narcotic remedies, on the liberal use of which probably depended the superior reputation acquired by some of them over their more cautious antagonists. Of this superiority, a singular instance occurs in the many existing testimonies to the fame of Heraclides of Tarentum, recorded as the most successful physician in any age or country of the world.

The names of Serapion and Philinus have been preserved as the two first and most eminent teachers of ancient empiricism. To the conduct of their disciples, besides the changes effected by their principles in the  
essence

effence of medicine, may be traced those which soon began to appear in it's external form and condition.

No longer engaged in studying systems, and averse to speculating, even on symptoms of disease, they exerted their whole faculties in investigating the power of medicinal substances, which laid the foundation of their pre-eminence in pharmaceutical skill. When sufficient exercise was found for this peculiar talent, the care of prescribing diet, and performing manual operations, were left to others, who in like manner confined themselves to their several departments.

The healing art, which had hitherto been uniformly studied and practised in all it's parts by one man, thus became divided into various branches, so that the dietetic and pharmaceutic physician seldom acted in concert. Nor did the surgeons generally employ their hands or instruments, but in succession to them, except in cases of accidents. The apotheca, or repository of simple and compound medicines, was for a long time in the house of the pharmaceutic phy-



fician, whither they were brought ready for use by the several tribes of collectors and workmen, who at length used an accidental knowledge of their qualities, as a step to usurp the office and dignity of their masters. The consequences of this usurpation, and the arrangements of present practice founded upon it, are not objects of present discussion, though they may deserve greater consideration in a public view, than the policy of past ages has yet allotted to them.

MEMOIRS OF MEDICINE, &c.

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B O O K II.

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THE STATE OF MEDICINE  
AMONGST THE ROMANS,  
BEFORE THE TIME OF GALEN.

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B O O K II.

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## C H A P. I.

OF THE PRINCIPAL CAUSES WHICH RETARDED  
THE ESTABLISHMENT OF MEDICINE AT ROME.

**T**HOUGH the progressive state of general knowledge has usually kept pace with the gradual refinements of civilized life, the advancement of particular sciences has often depended on a variety of local and temporary causes.

In the equality subsisting amongst the ancient republics of Greece, dignity and emolument were the rewards of superior acquirements in those arts, that alleviate the common sufferings, and smooth the ordinary asperities of human life. Such arts, however, were very differently estimated amongst the early Romans, on whose native

and unsubdued ruggedness was founded their extraordinary power and pre-eminence over other nations. Compelled by the natural hostility of their primary association to constant war abroad, and the ceaseless struggles of political rivalry at home, their general habits of life necessarily precluded both luxury and indolence, those fruitful sources of modern disease. And here may be seen one considerable cause, why the art of healing gained so late an establishment at Rome.

But it cannot be supposed, that they were ever wholly inattentive to the subject, or negligent of obvious and common methods of relieving pain, or promoting the healing of wounds and broken limbs. All the acquired courage of the sternest patriotism, though fearless of death and danger, must occasionally have yielded to the hopes of regaining lost health and strength; nor is it possible to imagine Mutius Scævola himself, obstinately negligent of any attempts to assist the cure of his mutilated arm.

The vanity, which so long professed the most open disdain of foreign manners, was  
generally

generally eager to domesticate the divinities of other countries, with a view of rendering Rome no less the reservoir of celestial than of human power. On this ground, equally characteristic of pride and ignorance, the Romans sent an early deputation of their Chiefs to Epidaurus, whence they transported in great pomp a sacred serpent, the symbol of Esculapius, for whose worship they had prepared a temple on a small island in the middle of the Tiber. But excepting the priests whom they appointed to regulate the ceremonies of this worship, there is no mention in their history of any medical practitioners, before the 534th year after the building of Rome.

At this period, Arcagathus a Peloponnesian got permission, with some difficulty, to open a shop in a public part of the city for dispensing some external remedies, as external diseases were the only ones that were allowed to be publicly cured. In his success, however, the sturdy patriots of the times foresaw the same danger to corporal courage, which threatened the mental firmness of the State from a growing taste for  
general



general and polite learning. The surgeon was therefore soon banished, in company with all the philosophers of Greece, who had begun to teach their conquerors the sciences of humanity.

The most strenuous opposer of Grecian medicine was Cato the Cenfor, so famed for inflexible attachment to primitive manners, as the only securities for preserving the power and liberty of Rome.

On whatever grounds this peculiar antipathy may be defended, it will remain a question, whether principles hostile to the power and liberty of other nations deserve to be regarded as laudable motives of public action. Such a query, in this place, can indeed be introduced only in compliance with the claims of equal benevolence, which seem to demand all opportunities to be taken of more reasonably appreciating those qualities, and that conduct, which, seen through the dazzling medium of historical embellishment, have too long usurped the admiration of mankind.

But

But it is in our direct province, to notice the barbarous inconsistency of the ancient Romans, in banishing the professors of an art, who pretended to some rule of practice, whilst they submitted to the rudest and most ineffectual of it's processes. Of this nature was the conduct of Cato himself, who joined to the utmost indignation against medicine as a cultivated science, a reliance on the most ridiculous and impotent remedies. His extravagant eulogies on the sanative powers of cabbage, in the treatise he composed on agricultural subjects, might indeed be accounted for in a way less disgraceful to his understanding, than his zeal in persuading his countrymen to rely on charms and magic songs, for the cure of broken bones, in preference to the treatment of any regular practitioner.

The busy and warlike enthusiasm of the Romans, diminishing with the causes that gave it birth, at length rendered their favourite employments useless, and compelled them to seek amusement from the superior skill and dexterity of strangers. For this purpose they condescended to study the arts  
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of rhetoric and oratory, as peculiarly fitted to promote the selfish and ambitious views, for which the best characters amongst them were too often distinguished. Other sciences were left to the industry and ingenuity of those whom they had enslaved, and thought beneath their dignity. And here appears the chief cause, why their medical practitioners so long continued in a servile state; and why the art itself, in spite of its intrinsic importance, was classed, in the language of the courtly Virgil, amongst the *artes mutæ*, or silent offices, which became degraded by their application to common use.

It would be easy to enlarge on the ill-founded pride, which prevented the Romans from feeling or acknowledging their inferiority in those accomplishments, that alone constitute the real superiority of man. But it is matter of surprise, that amongst the cargoes of statues and paintings, and the variety of books, which their conquering generals sent home from Greece, no thought was bestowed on the works of Hippocrates, which even Pompey himself neglected, in his eagerness to discover the childish antidote of Mithridates.

Mithridates. Nor is it less singular, that, in the multifarious edicts of the senate, no notice occurs on the subject of public health, at the time when it's attention seems to have been particularly called to this consideration, by the public bequest to the Roman people of the medical books of Attalus, the Pergamenian king, which he had valued above all his earthly treasures.

## C H A P. II.

OF THE MOST EMINENT PHYSICIANS AMONGST  
THE ROMANS BEFORE CELSUS.

THE late date of medical annals amongst this eminent people is singularly contrasted by the celebrity of the first name which they record.

Asclepiades, a native of Prusa in Bithynia, who seems to have been an adept in the fashionable philosophy of Greece, and was certainly possessed of all the subtle ingenuity of his countrymen, settled as a practitioner of medicine at Rome, about the time of the Mithridatic war. From his name it has been supposed, that he was descended from the Esculapian family. But it must be observed, that, from a patronymick title, Asclepiades was become a mere optional appellative, not only for those who pretended to distinction in the healing art, but also for adepts in other sciences.

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The eloquence and self-sufficiency of our physician appear to have qualified him for the pre-eminence he assumed over the vulgar herd of his brethren. To humour the inconsistent prejudices of the Romans, who objected equally to powerful remedies and slow cures, he took the motto of *tuto, jucundé, & celeriter*, and began his career by declaiming against the established practice, which he satirically denominated a meditation on death. His claim to originality he likewise confirmed by disowning all ancient theories, and promulgating one of his own creation in their stead. For this purpose he adopted the atomic philosophy of Epicurus as the basis of his system, which represented all the phenomena of animal life, dependant on the motion of corpuscular atoms through corresponding pores. On this foundation, his new fabric of pathology was recommended by a peculiar air of simplicity and consistence, admitting only two causes of disease, in the mal-conformation of these animal corpuscles, or of the passages through which they circulate.

Thus



Thus we see Asclepiades the father of inventions, which in different forms and new dresses have continued to amuse many of his speculative followers down to the present day.

His great practical singularity was the neglect, or positive rejection of purgative medicines, in which he was generally imitated by the atomic physicians of antiquity. In other respects he was contented to follow the old regimen, except that he made a more liberal use of cold water in fevers than had been usually done, and sometimes attempted, by keeping his febrile patients without sleep, and in constant motion, to cure one disease by exciting another. His whimsical notion of digestion's being a mere solution of the aliment at the place of it's final destination, deserves less notice, than his more probable supposition of the urinary secretion in the kidneys being assisted by a general absorption from the intestinal canal.

The great character given to Asclepiades, by his early disciples, has been rendered somewhat

somewhat equivocal, not less by the reports of his quackery, than the unbecoming confidence, with which he declared, that he would never be sick himself, though his good fortune assisted in verifying this prediction, as he died at an advanced age, by a fall down stairs.

Amongst the first physicians recorded in Roman annals, some names have the singular felicity of being preserved in classic story. Asclapho is much praised, and the death of Alexion pathetically lamented in the letters of Cicero. The same celebrated pen has likewise transmitted the fame of Craterus, the physician of Atticus, immortalized for the reputed infallibility of his prognostics, by that proverbial allusion of Horace, "*Craterum dixisse putato.*"

From the manner in which Cicero has spoken of other physicians, some have concluded highly of the respect with which they were treated by the Romans at that learned period. But it must be recollected, that fervility of condition precluded even the most eminent scholars and artists, from

any approach to equality with their masters, amongst whom the most refined and well-informed could only admit them to any degree of familiarity as a favour, or make them companions of their festive hours, merely for amusement and relaxation. This species of condescension towards medical characters may be instanced in Philotas, who entertained the son of Mark Anthony, during supper, by a logical and ridiculous dispute with a brother physician, for which he received the sideboard of plate, as a reward for his ingenuity in proving, that if cold water be good in a fever, it must be so in all fevers.

The first public justice done to the practitioners of medicine at Rome was by a decree of Cæsar, which entitled them to the rights of citizenship. Antistius, who had the melancholy distinction of being called to examine the wounds of that usurper after his assassination, was probably one of the first subjects of this elevation. Another was Artorius, remembered only as the physician of Octavius, and the companion of his cowardly flight from Philippi.

After the settlement of the empire in the Julian family, the Romans seemed eager to make amends for the long neglect, with which their ancestors had treated this benevolent art. The famous Antonius Musa obtained permission of the senate to wear a gold ring, an exclusive privilege of the highest ranks, and had his statue erected, during his life-time, in the temple of Esculapius. It is not easy, however, to ascertain the grounds of this favour, which have been attributed by some to his professional merit, and by others to his taste for learning and poetry, or rather to the partiality of Augustus, whom he had cured of some disease by a method of treatment, opposite to that which had been directed by his former physicians. Euphorbus, the brother of Musa, and physician to young Juba, the Numidian prince, dedicated a treatise of natural history to Caius Cæsar, grandson to Augustus.

The next medical name of importance is Philo of Tarsus, who invented an antidote, which was probably the original of that composition long known under the title of Philonium. And here the mention of antidote,

or specific against malignant influence, leads to some account of that extraordinary dread of poison, which prevailed so much amongst the ancients, and especially the Romans, whose belief on this subject was bounded only by the extremes of credulity and superstition.

From these excessive apprehensions, it has been supposed, that the secret arts of destruction had arrived at a degree of refinement and certainty, unknown to modern ingenuity. But there appears scarcely any other ground for this supposition, than the eagerness with which compositions were multiplied and augmented with every ingredient, that tradition or analogy represented as effectual in the smallest degree, against all the dangers of poisonous influence. Of faith, likewise, in these compounds, both for their resistance to morbid contagion, and as specifics for every bodily disease, Roman history furnishes many singular narratives, which reflect but little credit on the philosophic principles of that people.

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The advancing estimation of our art is visible in the general prosperity of it's practitioners, during the short calm, that succeeded those storms, which had so long shaken the peace of the world, and finally changed the fate of Rome. Perhaps, however, the Roman names of physicians at this period, on which much stress has been laid, were merely adopted by those of low origin, conformably to the custom of clients and dependants, calling themselves after their patrons and masters.

But whatever was the case in this respect, there is sufficient proof of their being well paid, as we read of Aruntius, Calpetanus, Rubrius, and Albutius, who, for their attendance on the emperors Augustus and his two immediate successors, had each an annual salary of two hundred and fifty thousand sesterces, equal to two thousand pounds of English money, an immense sum for such a service at that time.

Stertinius, who had twice as much, with which he thought himself inadequately rewarded, acquired so great a fortune, that af-



ter expending prodigious sums in embellishing his native city of Naples, he left to his heirs an inheritance, valued at thirty millions of sesterces. Alcon, celebrated by Martial for his dexterity in curing hernias by incision, was no less nobly remunerated by the public, who repaid him, in the course of a few years practice, ten millions of sesterces which he had lost by a law-suit.

Roman medicine was indebted to Scribonius Largus, of a patrician family, for a work still in existence, on the variety of remedies and compositions, that had ever been used amongst his countrymen. That the custom of abbreviation in prescriptions had grown into considerable practice, appears from a similar and contemporary work of Menecrates, a Grecian, who boasted of writing the names and quantities of all ingredients at full length.

Two other Grecians of this age are recorded for a species of dexterity, that reflects but little credit on the art. Charicles, the physician of Tiberius, to avoid the suspicion of that jealous monster, was accustomed to  
feel

feel his pulse during the ceremony of kissing his hand, with a view of prognosticating the tyrant's approaching dissolution. Xenophon, the confidential favourite of the stupid Claudius, had the address to gain an exemption from all public imposts for the place of his nativity, for which extraordinary favour he repaid his employer, by seconding the criminal designs of Agrippina to poison him.

Not long after this period flourished the celebrated Themison, generally reputed the first founder of the methodic sect, though not more famous for the regularity of his theory, than the infelicity of his practice, if credit be given to that severe comparison of the sarcastic Juvenal, "*Quot Themison ægros autumnò occiderit uno.*" The contemporary name of Pamphilus is preserved for his skill in curing the mentagra, a disease of the leprous kind, so called from it's primarily affecting the chin and lower part of the face, and said to have been farther remarkable for confining it's ravages to the rich and idle, the probable effect of indulgence and excess.

To causes connected with luxury, may likewise be attributed the changes introduced at this period into the external state of medicine. Physicians were now contented with the study and treatment of single diseases, and were attended on most occasions by a number of subaltern assistants, who superintended the exercises of the sick, and were employed in the frictions, unctions, and fumigations, which constituted a principal part of medical practice. From this time also the tonfores, or barbers, may be ranked amongst the appendages of the profession, which privilege they still possess in many countries of Europe, and have scarcely surrendered in our own.

## CHAP. III.

## OF CELSUS.

IT is singular, that the history of Aurelius Cornelius Celsus, the most classical of all ancient writers on medicine, should be involved in so much obscurity, as to occasion doubts both of his person and condition, and the age in which he lived. The intrinsic evidence of his works proves him, however, to have been a consummate adept in all the learning of a Roman physician, and affords strong presumption of their being composed in the most learned æra of his country.

The primitive state of medicine has never been more perspicuously delineated than in the preface with which they are introduced, nor has any author given a more regular and connected account of all the medical sects of antiquity, or more justly appreciated their doctrines, and the arguments by which they were supported. Indeed the order and method of the whole, render the writings of  
Celsus

Celsus curious and valuable, in a degree far beyond those of any contemporary authors.

By the division of them into eight books, they were peculiarly adapted to the outline of ancient practice. The first four treat of such internal diseases as require only dietetic regimen; the fifth and sixth describe such as are to be cured by medicine, and the two last whatever demands chirurgical assistance.

To one unacquainted with the extensive duties of the ancient dietetic physician, many observations of Celsus on the various articles of food, and the modes of dressing it, will appear trifling and tautological. Some of them, doubtless, were dictated under the influence of vulgar and established prejudice.

With the most rigid discipline of his predecessors, in acute complaints, he applied cold externally in a manner unknown to modern medicine. To forward the crisis of slow fevers, he made no scruple of using most liberal ablutions of cold water, joined with such co-  
pious



pious and repeated bleedings, as seem to have set all common caution at defiance. Nor was he content with less powerful agents, when stimulating became necessary, generally prescribing in intermissions of fever, large draughts of vinegar, with mustard mixed in it, and often compositions of pepper, myrrh, and castor, or a strong foetid gum, called laserpitium, probably the same with the asafœtida of modern use.

Few systems of surgery have been more comprehensive and methodical than that of Celsus. The division which he makes of this branch of medicine, according to it's four principal indications, of adding what is defective, removing redundancies, uniting divided parts, and dividing those which are improperly joined, is perhaps incapable of extension or improvement.

The first of these intentions seems to have been much oftener attempted by the ancients, than it is by the moderns, amongst whom the restoration of lost or mutilated parts is seldom an object of serious practice. Under the second head, he lays down the most accurate  
rules



rules and directions, describing the important operations of amputating, trepanning, lithotomy, and even couching, with all imaginable precision. In the third part, he scarcely omits any thing necessary to be known or practised, in the treatment of luxations and fractures. But he is still more discriminative and exact on the fourth intention, especially in what relates to hernias, which he classes according to the nature of their contents, applying to each those distinguishing appellations, which characterise them in the present day.

## C H A P. IV.

OF MISCELLANEOUS MATTERS FROM THE TIME  
OF CELSUS TO THE ESTABLISHMENT OF THE  
METHODISTIC SECT.

IF the works of Celfus be admitted as a criterion of medical science amongst the Romans, a more favourable judgment will be given, than the nature or aggregate of other memorials seems to warrant.

But almost every thing known of those supposed to be his contemporaries, is either confined to their ingenuity in compiling and multiplying antidotes, or the more disgraceful dexterity of raising their fortunes, on the ignorance and credulity of their patients. And indeed in all medical matters, much of what is called the age of the twelve Cæsars exhibits an extraordinary scene of jarring opinion, and trifling or inconsistent practice,

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In this chaotic jumble, however, are to be seen some glimpses of order and selection in the conduct of those physicians who were denominated eclectics, or choosers, in contradistinction to the episynthetics, who admitted the whole farrago of past ages as the ground of their practice.

At a time thus favourable for reformation, Theffalus, a bold and daring adventurer, appeared on the medical stage. He was a native of Tralles, in Lydia, of low birth, and mean education, but singularly gifted for availing himself of that credit, which the world so readily grants to noisy pretension, in preference to silent and modest merit.

Theffalus, who seems to have well studied his ground, began his career by loudly descanting on the imperfections of medical science, and the inconsistencies of his contemporaries, thus paving the way for his own new system of doctrine and practice. The materials for his theory he found in the cosmogony of Epicurus, which had indeed been employed by his predecessors Asclepiades

piades and Themison, for a similar purpose. This he extended to every variety both of disease and remedy, thereby attempting to render his scheme as compendious as possible, and to curtail every branch of the science, so that the whole might be easily learnt in six months.

Such fallacious pretensions to reduce into a small compass the most multifarious and difficult of human sciences, procured him that degree of popular applause, which inflamed his vanity and presumption so much, that he assumed the title of Jatronikes, or conqueror of physicians, which he ordered to be engraven on his tomb. A more rational pride would have sought reputation from the conquest of diseases, rather than of doctors. The manner, in which the novelties of this schemer were applied and promulgated, will be seen more at large in a succeeding chapter.

Contemporary with Theffalus was Andromachus, the physician of the emperor Nero, celebrated as the first who bore the honourable appellation of archiater, or physician  
of

of the prince. This term, however, from it's equivocal etymology, may be construed into a mere specification of superiority over other phyficians.

But the name of Andromachus is lefs indebted to the dignity of his occupation, than to the permanent and unvarying refpect paid by his countrymen, to that compofition which he invented, and called theriaca, from the viper, one of it's principal ingredients. As evidences of this refpect, may be mentioned the testimony, which the wife Antoninus long afterwards gave of it's efficacy in preferving his own health, and the personal care, with which moft of the fucceeding emperors fuperintended it's compofition, which remains to this day an object of equal attention to the government of the Venetians, the only legitimate offspring of ancient Rome.

This, or another fimilar antidote under the name of Galene, or the pacifier, Andromachus celebrated in a Greek poem, dedicated to his mafter Nero, which reminds us of a general cuftom amongst the Roman  
phyficians

physicians to make known in poetic strains the virtues of similar panaceas, which it was the chief business of their lives to invent.

The æra in question affords the first memorials of astrological quackery combined with the art of healing. Chrinas and Charmias are recorded for thriving so much by this species of imposture, that the former left by will one hundred thousand pounds to embellish his native city of Marseilles, and the latter felt sufficient confidence to demand a sum equal to one thousand pounds for a single prescription.

The flourishing circumstances of practitioners may be farther guessed at, by the pomp with which Symmachus visited his patients, followed by a train of one hundred servants and pupils, and by the facility with which the physician Posthumius Macrinus obtained from the emperor the freedom of the city for his friends and dependants.

But we have here to notice some more solid and lasting benefits accruing to medicine from foreign aid, than it ever gained

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by the vanity or extravagance of it's professors. Those eminent and primitive naturalists Dioscorides and Pliny, who were probably contemporary writers at this period, contributed both to increase the materia medica, and to diffuse a taste for investigating more carefully the power of medicinal substances.

The opportunities, which the military marches of Dioscorides, over most parts of the known world, afforded him of examining the vegetable and mineral kingdoms of nature, seem to have been diligently employed. In these researches, he is the first who describes the chymical process of extracting quicksilver from cinnabar by fire, in a vessel called ambix, the parent word of that important instrument of the laboratory, alembic.

To Pliny's extraordinary acquaintance with natural substances, may be added his critical acumen on medical subjects, apparent in his observations on the theory and practice of his own times. The exorbitant and heterogeneous compositions then in  
fashion

fashion furnished him with great scope for censure, and seem to have determined him to a preference of the empirical sects.

The defects and mistakes of such an author will need but little apology to those, who, fired by the example of his zeal and industry in the pursuit of knowledge, either aim at the good of others, or seek for honourable fame to themselves. But the vanity, which boasts of sparing a few idle hours for study, must be humbled in contemplating a statesman immersed in the politics of a world, dedicating to it that time, which the most diligent usually give to ease and refreshment. For a long series of years, in every interval of public business, during his repasts, in his journeys, and whilst his attendants were buried in sleep, almost every hour added something to those rich and copious stores of information, for which posterity is indebted to this benevolent philosopher. Even his death, incurred by insatiable thirst after knowledge, remains the most venerable monument of philosophic zeal on record, independent of the eloquent and pathetic description given by the pen of his nephew,

that illustrious fucceffor to his virtues and fortune.

After the age of Pliny there is little guide for conjecture on the external state of medicine in Rome, before the foundation of Hadrian's academy, in which professors of this science had a place. But this prince did not reap much fruit from his endeavours to improve it, if it be true, that he was compelled to shorten his own life on account of some severe and painful disease, which his physicians could not relieve.

In his reign Rufus the Ephesian is thought to have composed those fragments of medical writing, that have survived to our times. But the more illustrious name of Aretæus Cappadox calls us to a subject of greater novelty.

From various scattered accounts in history we are informed of the pneumatic sect of physicians, in great vogue about this period of time, who were probably thus denominated

minated from their physiological adoption of that ætherial principle, which many speculative philosophers of antiquity had regarded as the *primum mobile* of organised bodies. Athenæus, a practitioner in the time of Pliny, has been called the father of these medical pneumatists, though there are no vestiges of their connected principles prior to those contained in the works of Aretæus.

The classical purity and elegance of this singular writer has occasioned a suspicion, that he must have lived long before the time in question, when literary judgment had greatly declined from its zenith of perfection in the Augustan age. If from internal evidence, his works be thought of much later date, there is reason for considering him as an instance of genius very superior to the examples of negligence and bad taste in contemporary writers.

The distinctive character of the pneumatic sect consisted, as before mentioned, in the belief of a spirituous and subtile vapour circulating in the human body, which being

compressed or dilated in it's various cavities, became the cause of such diseases, as could not be classed amongst those affecting the solids or grosser fluids, and which a modern vocabulary would probably denominate nervous or spasmodic. By the different resistance which this elastic vapour met with in different parts and states of the body, a variety of effects were supposed to be produced.

Aretæus, in imagining it the source of heat, coldness, dryness, and moisture, makes it the cause of many diseases, as may be instanced in his notion of it's being condensed, in the cases of dropſy, and fluor albus.

But his practice, founded on that of past ages, was more experimental and rational than his theory. To him we are indebted for restoring the use of cantharides, which had long been rejected from the materia medica of antiquity, not only as an useless but a dangerous medicine, either for external or internal purposes.

## CHAP. V.

## OF THE SECT OF THE METHODISTS.

SORANUS of Alexandria, who practised medicine in Rome during the reigns of Trajan and Hadrian, put the finishing hand to the system begun and carried on by Asclepiades, Themison, and Theffalus. It was probably in his time, that the supporters of this system became universally distinguished by the name of Methodists, on account of the regular and uniform modes of their practice, which however consisted chiefly in a more rigid application of ancient regimen, than that in common use.

To obtain a more compleat view of the subject, we must again observe the facility, with which the simple philosophy of Epicurus was convertible into medical physiology. Admitting the animation of nature to depend on a circulation of atoms through spaces, a certain proportion between the two must necessarily subsist. The life of



organised bodies being supposed to consist in a multiplication of these circulations, forming the chain and boundary of each other, the impediments to their free motion were regarded as the sole causes of disease. The pathology grounded on such a basis, referred therefore to the two simple causes of stricture or laxity, consequent on these impediments, without any discrimination of local or universal affection. By stating the practical application of these notions to particular cases, the outline of medical methodism will be more clearly delineated.

Every disease exhibiting obvious marks of retention, or appearances of hardness, tumefaction, and outward inflammation, the Methodist physician attributed to stricture, and the contrary circumstances of increased discharge, softness, and diminution, to laxity. And as the same remedies were indicated, whether the fault was in atoms or pores, he never sought after primary or occult causes, depending wholly on the general character of the disease. But whenever the symptoms were equivocal, or combined by any alternate preponderance of causes,

causes, he was diligent to ascertain the criterions, which distinguish one disease from another, thus availing himself of the diagnostic rules of dogmatism, which in words he pretended to despise.

Nor did his therapeutics differ essentially from those of ancient establishment, except in the rejection of purgative remedies in common cases, which indeed may be considered as the most conspicuous badge of his sect.

The precision and formality of their regimen, assisted by the loudness of their declamations against former systems, seem to have been the chief causes, which elevated these sectaries far beyond their real importance.

It would be useless to dwell longer on their history, were it not for the amusing climax, which the gradation of their proceedings forms in the history of medicine. Every cure was commenced by a rigid enforcement of the dietition, or three days  
entire

entire abstinence, which was resumed in obstinate cases, a second and a third time, after intervals barely sufficient to allow of as much nourishment, as might keep the patient from dying of hunger and thirst. The adaptation of this nourishment to the nature of every complaint, was likewise studied with scrupulous exactness.

A warm decoction of farinaceous feeds, called *alica*, was the common drink in disorders from stricture, to which were outwardly joined copious warm ablutions, fomentations, and cataplasms, with frictions of oil, scarifications, cuppings, and bleeding with leeches, in various parts of the body and limbs. The same routine was followed in complaints from laxity, with cold drinks, and cold and corrugating applications instead of warm ones.

When medicinal substances and compositions were used, a preference was generally given to the most violent and powerful, for which the body was generally prepared by a copious bleeding.

After

After a failure of these common and ordinary methods, a long and severe course of discipline was instituted, with a view of changing and entirely renewing the whole structure of the body. This renovation, dignified with the name of *metasyncrasis*, was attempted by a round of operations, which had the name of *cycle*, comprising every sort of regimen and action capable of producing any alteration, and often transcending both the strength and courage of the sufferers,

To the severest abstinence, was added a prohibition to move or speak for a certain time, till by inward and outward applications of every stimulating and acrid ingredient, all viscid and offending matter might be dissolved, and rendered capable of being drained out of the body. These applications became gradually more severe, till the patients could endure to have their skin blistered and burnt almost from head to foot, and to have their entrails tormented, by the most acrimonious substances, administered in every possible way. To bring  
about

about the compleat difcharge of old materials, the noſtrils were ſtimulated by the moſt pungent ſternutatories, the ears ſerenaded by the moſt violent noiſes, the voice exerted in perpetual ſhoutiug, and the limbs in conſtant exerciſe, to which were added the moſt profuſe bleedings, ſweatings, and evacuations of every deſcription, compatible with the immediate ſafety of the patient. If this became doubtful, every indiſpenſible delay, or neceſſary reſreſhment, occaſioned a renewal of the whole proceſs, which was then called *cyclus reſumptivus*.

During theſe proceedings, frequent changes were made in diet, and the drimyphagia, a courſe of dry and ſalted meats, often ſucceeded the more ſimple and ſucculent nourishment uſed at the beginning. As a general con- cluſion of the ceremony, came the cataclyſmus, or fluicing and ducking the renovated body in medicated waters. If this were ſuperſeded by a general failure of the whole plan, the patient was recommended to change of air, long journeys by ſea and land, and to the exerciſe of patience and reſignation, ſo  
that



that the Methodist physician, like his successors, was sometimes compelled to acknowledge the futility of his art.

For this epitome of methodistic medicine, we are indebted to Cœlius Aurelianus, the translator and commentator of the original work of Soranus, which has perished in the wreck of time. Of the age in which this author lived, there is no certain evidence, though himself informs us, that he was an African, and a native of Sicca, in Numidia. From the barbarity of his language, it may be concluded that he was a provincial physician, and never resided long in Rome. It is likewise probable, that he was one of the last writers of the sect to which he belonged, as it was soon afterwards overwhelmed by the superior lustre of Galen's system.

Many curious matters occur in the quotations and criticisms of Cœlius Aurelianus, both relating to physicians and diseases, amongst which latter may be reckoned his description of the malthacus, or effeminacy  
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of the fine gentlemen of antiquity, which was thought by the sobriety of those times a serious and proper object of medical discipline.

MEMOIRS OF MEDICINE, &c.

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B O O K III.

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THE SYSTEM OF GALEN,

AND THE

GENERAL STATE OF MEDICINE IN THE  
LOWER EMPIRE,

AMONGST THE ARABIANS,

AND

IN THE DARK AGES BEFORE THE RESTORATION  
OF LEARNING IN EUROPE.

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B O O K III.

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## C H A P. I.

## THE LIFE AND CHARACTER OF GALEN.

CLAUDIUS Galenus Pergamenus, denominated the second father and founder of medicine, was born in the 131st year of the Christian æra. His prænomen was probably adopted in compliment to some Roman family of distinction, but his surname was derived from Pergamus, in Asia Minor, the place of his birth.

His father Nicon, a celebrated architect no inferior character at that time, was ambitious of initiating him early into all the learning of the age, for which purpose he sent him to the best schools of the empire. At that of Alexandria, the most celebrated of these seminaries, Galen soon gave pregnant

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nant proofs of judgment, by selecting the rudiments of his philosophy from the most approved doctrine of the Stoics, Academics, and Peripatetics, in opposition to the impious and fashionable system of Epicurus. In this place, likewise, began his attachment to that science, which he was destined to govern for many centuries with oracular authority and uncontrolled sway.

At the age of thirty-two years he went to Rome, where he found the medical practitioners of the old schools, subjugated to the power and credit of the methodic sect. Into the interests of the former he entered at once with great zeal, but wanting temper and experience necessary to a successful contest with a numerous and popular party, he returned home, under pretence of avoiding the plague, which then reigned in the metropolis of the world.

That he had made himself known to advantage, appears from his being soon afterwards commanded to attend the emperors Marcus Aurelius and Lucius Verus at Aquileia, in the vicinity of his native country.

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This fortunate opportunity was so well employed, that the good Aurelius committed to him the entire care of his two sick sons, during his famous expedition into Germany, and at his return ordered him to Rome, to consult with the Imperial physicians respecting a complaint of his own. On this occasion a successful opinion, contrary to that of his colleagues, raised him to an eminence, from which he was able to defy the power, and finally to ruin the credit of his former opponents.

As the greatest part of Galen's life was spent in a zealous pursuit of knowledge, there can be no reason for questioning the excellence of his general character. Of this a striking proof occurs, in the public respect which he enjoyed to the end of his days, amidst those violent political tumults, that afforded very slender security to the merit of any other individual. But more intrinsic evidence to this purpose is to be found in the ordinary tenor and spirit of his works, bespeaking a mind under the best influence.



The justice and piety of his reflections on the Omnipotent Creator are strongly exemplified in his most celebrated treatise *De Ufu Partium*, where he says, “ In writing this book, I compose a hymn of praise to the Maker of the human frame, and am persuaded that a grateful acknowledgment of his wisdom, power and goodness herein, is more agreeable to him than the sacrifice of hecatombs, or the most costly incense.”

In a mind sufficiently capacious to embrace the whole circle of human knowledge, it is no wonder to find a study, which has been the object of early choice and long contemplation, pursued with extraordinary ardour and intenseness through all its immediate and remote connexions. Thus we find every subject, possessing the most distant real or imaginary reference to medical concerns, strongly engaging the attention of Galen. As fruits of his researches, we are told, that he composed five hundred different essays on the various parts of medicine, and half as many on other scientific subjects connected with it.

From

From this account, a pretty certain estimate may be formed of unequalled industry, which claims the gratitude of his successors, not only for real improvement, but even on the score of mistake. For if truth must necessarily be sought in the mazes of error, every earnest inquirer has undoubted obligations to those predecessors in the search, whose mistaken wanderings indicate the paths already tried in vain.

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But the licentious and unbounded speculation, which so much deforms the writings of Galen, admits of great apology, both from the constitution of his own mind, and the circumstances in which he was placed with regard to his antagonists, who constantly provoked him to the exertion of his dexterity, in accounting for every thing in his own manner. The corrupt example of contemporary authors may be likewise adduced in excuse for the same defect, as well as for that vanity and boldness of self applause, which, however indelicate to present modes of thinking, formed, in his day, a common characteristic of learned men.

To gain a connected idea of Galen's additions to the system of Hippocrates, whose imitator he professed himself, it will be necessary to follow the same plan adopted in considering the works of that more pure original, of which the copy too often exhibits a distorted resemblance.

## C H A P. II.

## OF THE ANATOMY, PHYSIOLOGY, AND PATHOLOGICAL SKILL OF GALEN.

GALEN is very eloquent on the importance of anatomy, as the foundation of all useful knowledge in medicine, and compares a physician's ignorance on this subject, to that of an architect beginning to build without order or plan.

Whatever opportunities he might have had of examining human bodies at the school of Alexandria; it is pretty certain, that public and religious prejudices restrained the freedom of such examinations at Rome. The greatest part of his researches, therefore, terminated in the comparative anatomy of brutes, for which purpose he generally chose the ape for dissection, as bearing the nearest resemblance to the figure and structure of man.

In Galen's minute descriptions of the brain and it's appendages, are to be seen considerable advances in the knowledge of these important parts, from the time of their real nature and uses being first discovered. His accurate delineation of the course of those nerves coming immediately from the head, and those proceeding from the spinal marrow, proves the great care and perseverance of his investigations.

It was a peculiar part of his theory, to suppose a sort of respiration carried on in the ventricles of the brain, by the air which gained admittance through the cribriform lamella of the ethmoid bone. Another of his original ideas was that of the animal spirits being elaborated in the vascular plexus, formed by the branches of the carotid arteries, and conveyed thence to the organs of sense, from which they transmitted external impressions to the sensorium.

The first distinct notion of glandular secretion is to be found in his works, which clearly describe the separation of saliva from  
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the blood, and it's discharge by an excretory duct.

Abating his ignorance of the true circulation, Galen's anatomy of the thoracic and abdominal viscera would make no contemptible figure, amongst the best modern treatises on the subject.

Respecting the generative organs, his imagination led him through all the mazes of fancy and conjecture, where every attempt to elucidate his opinions would be no less difficult than unprofitable.

The adoption of those four supposed elements of nature, earth, air, fire, and water, as the component parts of the human body, forms the principal novelty of Galen's physiology. In the perfection and due proportion of these elements he places the source of health; the origin of sickness in their defect, or improper mixture; and exercises the utmost stretch of imagination, in calculating the varieties of temperament and disease, depending on the varieties of their qualities and combinations. But his zeal  
for



for system, like that of other philosophers, was compelled to leave many stubborn peculiarities to an occult cause, that final resort of human ignorance. It submitted likewise to the necessity of a partial intuitive sense, for the service of important organs, similar to the supposed power of the stomach, which discerns things peculiarly congenial to its purpose.

He assigned the powers of stimulating the body to three peculiar fluids, as the animal spirits distilled in the head for sensation and motion, the vital spirits elaborated in the heart for communicating heat, and the natural spirits deposited in the liver for nutrition and increase.

The vast and extensive outline of Galen's pathology can be considered only in some of its most prominent features.

His divisions of disease are scarcely less numerous, than all possible varieties and combinations of ill temperament and imperfect action can supply. Of their external causes, he reckoned six principal ones, to  
which,

which, because they do not actually form a part of the body, was absurdly given the name of non-naturals, viz. air, meat and drink, motion and rest, sleep and watchfulness, retentions and excretions, and lastly the passions of the mind.

In these he sought for the primary, or procatactic cause, which first set in motion the predisposing causes originating from some internal defect, and the proximate, which more immediately attend a disease in all its stages, and which indeed constitute its real essence. But his physiology of sickness, like that of health, obliged him to admit so many specific peculiarities, that the obscure and occult causes frequently out-number those, which he reckoned manifest and demonstrable.

The same slavery of system governed his consideration of symptoms, which he ranged in very peculiar orders and classes. But though it would be useless to describe all these minute and tedious divisions and arrangements, we are compelled to notice his judicious care in separating diagnostic from

from prognostic, and primary or pathognomonic from accidental or sympathetic signs. Nor must we forget that candour, which allows of so many exceptions by his frequent acknowledgment of specific symptoms, portending terminations wholly independent of common causes.

The little and equivocal notice of the pulse, so remarkable in the writings of ancient physicians, is amply compensated by the copiousness of Galen, who, after making it the greatest study of his life, left behind him sixteen or seventeen different treatises on this single subject. But here his imagination, fond of speculating on new ground, led him to the extremes of affectation and absurdity, where it would be more difficult to connect, or compress his redundancies, than in the wildest and most extensive of his other speculations.

It can only be said, that by considering it in the senses of absolute and relative, simple and compound, he finds as many varieties as the most ingenious calculator could wish,  
joining

joining every possible induction from the quantities, degrees, and times of it's motion and rest, dependant on the peculiar tone of the vessels, or the condition of the fluid they contain. The constancy or inconstancy of it's equalities and inequalities, it's regularities and irregularities, seem indeed to have afforded him an abundant exercise of fancy. It must, however, be confessed, that some of his terms and characters are strongly indicative of peculiarities, which more concise systems find it difficult to explain.

Galen's attention to the pulse led him to observe with great exactness those reciprocal actions of the heart, to which he first gave the names of systole and diastole. And, perhaps, in the probable views of gaining great advantages, from an accurate study and knowledge of these actions, is to be found the best apology for the extravagances of his theory relating to it.

But in concluding the subject, it is mere justice to acknowledge his prudence, which teaches the necessity of comparing the state of the pulse with all other symptoms, before

a final judgment of any disease is formed. Nor are many similar cautions, on other occasions, unworthy of being considered as the warning lights of reason, in the midst of much enthusiastic obscurity.

CHAP.

## C H A P. III.

OF GALEN'S THERAPEUTIC AND PHARMACEU-  
TICAL KNOWLEDGE.

THE generality of Galen's practical maxims, both for the prevention and cure of diseases, differed but little from those of Hippocrates.

In his declamations against the precipitate interference of art, and the neglect of proportioning the agent to the patient, he resembles the moderation of his great original, whom he likewise imitates, by strongly inculcating the necessity of assigning a proper importance to every relative, as well as direct circumstance of a case, before any specific practice be instituted.

His cautions respecting that equivocality of common appearances, which so frequently leads common practitioners into the most fatal error, are of the greatest practical



tical importance ; as are also his directions to keep in constant view the primary cause of a disorder, though it be last discovered, without neglecting any supervening symptoms, that may portend danger in a secondary way.

Like his predecessors, copious bleeding was one of Galen's most general and powerful remedies. In some acute diseases, he scrupled not to take away from his patients fifty ounces of blood in a day.

The medicinal substances used by Hippocrates were generally given singly, and in the most simple forms. Deviations from this rational custom had extended to an incredible degree before Galen, much of whose time was employed in arranging and reducing to order the multifarious compositions of his predecessors. But to the labour of methodizing, he added zeal to enlarge the overgrown catalogue, and thus became the founder of a new pharmacy, which the science of modern times has found it necessary greatly to curtail. Excepting however the number of ingredients, supposed to possess similar qualities,  
heaped

heaped together in boundless profusion, the simplicity of this pharmacy, consisting in the mere operations of powdering, boiling, or infusing, is strikingly contrasted by the more active scrutinies of a modern laboratory.

After what has been said of Galen's attachment to system, it is no wonder, to find his classification of medicines, analogous to that of his general pathology.

In conformity with his doctrines of humours and elements, he ranked every individual substance, according to it's actual or potential qualities of heat, cold, dryness, or moisture. Each of these he again subdivided into four inferior orders of quantity or degree, the multiplied results of which may be conceived, by tracing the plan through any single material, which may be hot in the first, second, third, or fourth degree, and dry in any one of them, or cold and moist in the same sort of varying proportion. This fanciful disposition was extended to all sorts of compounds, the effects of which were looked for in a ratio of their combined qualities, forming a store of remedies exactly appropriated

to every disease, in which the diagnostic symptoms were obvious and unequivocal.

When these effects were produced in a manner, not perfectly consonant to ordinary principles, or ordinary practice, they were attributed to a peculiar action of the whole composition, which then became a specific, adapted to the removal of some occult cause. But of specific remedies Galen was generally very sparing, always preferring those, in which some certain fitness to the disease was obvious.

The Galenical pharmacy, as it is described by this imperfect outline, remained, for ten centuries, a perfect code, or sealed book, from which the practitioners of medicine in our hemisphere thought it little less than sacrilege to deviate, even on the most minute occasions.

## C H A P. IV.

OF THE GENERAL STATE OF MEDICINE IN THE  
GREEK OR EASTERN EMPIRE, FROM THE TIME  
OF GALEN TO THAT OF THE ARABIANS.

THE history of ancient Rome furnishes no memorials of medicine after Galen's death, which happened at the commencement of a long and extraordinary stagnation in human learning.

To whatever causes the fall of Roman greatness be ascribed, there is no difficulty in assigning to the convulsions which accompanied it, the most fatal effects on the prosperity of liberal science. But in estimating the peculiar circumstances, which combined to change the intellectual state of mankind, the nature and power of those principles and opinions, introduced by the establishment of a new religion, must be added to the general influence of political distractions.

The worst of these principles may easily be traced to the abuses, which made of this religion a political engine, to forward the fraudulent designs of ambition or avarice. Nor is it less evident, that both these passions conspired to obscure the excellence of christianity, by instilling into the most zealous of it's converts that contempt of mere human knowledge, which became one source of literary declension, that might have been obviated by a more just and reasonable estimate of profane science.

Prior, however, to the view of our art in it's lowest degradation under ecclesiastical tyranny, we have to trace back it's course to Greece, with the translation of the Imperial residence from Rome to Byzantium.

Constantine's eagerness, to make his new city the rival of that which he had deserted, induced him to promote the establishment of arts and sciences with extraordinary munificence. The regulation and prosperity of medical practitioners was particularly attended to for this purpose, as appears from his elevation of the *Archiatri*, or court physicians



ficians of Constantinople, to the senatorian rank, with an exclusive exemption from it's public duties.

His nephew Julian, though seldom friendly to the favourite projects of his uncle, not only confirmed these privileges, but personally treated all the professors of medicine with respectful distinction.

Several institutions of succeeding emperors, however incompetent to oppose the growing lethargy of learning, had a direct view to the improvement of this science. For besides the Archiatri of the palace, the Theodosian code informs us of provincial Archiatri, each of whom had an annual stipend of two hundred and fifty thousand sesterces, for superintending the general interests and condition of their province.

All these public physicians the emperor Valentinian I. incorporated into a college at Constantinople, under the direction of a president, who had the title of Comes Archiattrorum, and was, in all political dignity, equal to the other comites or counts of the



empire, whose rank qualified them for the proconsular office. The same institutions were extended to Rome, where twelve principal or superintending physicians were appointed to preside in the twelve quarters of the city. On such foundations stand the political dignities of modern physicians, peculiar to those countries of Europe, where any external forms of the lower empire still subsist.

But in spite of all encouragement, the short annals of Byzantine medicine exhibit the same feebleness of character, which stamped the genius of the times, and left a chasm in learning nearly commensurate with the long protracted duration of the Greek empire.

The first name in the scanty list is that of Oribasius, the physician and friend of Julian, who made him quæstor, and bore testimony to his fidelity through all the revolutions of fortune. His perseverance in the faith of his patron, which exposed him to a long and rigorous exile, proves indeed the firmness of his friendship, though the servility

lity of his professional sentiments allows but little claim to greatness of character.

In the seventy-two books which he composed on medical subjects, the closeness of his imitation deservedly gained him the nickname of Galen's Ape. In the seventeen still extant is the first mention of that strange species of phrenzy, the lycanthropia, often described in the exaggerated pages of succeeding writers, in which those affected are said to have wandered like wolves by night, amidst tombs and sepulchres.

A more liberal copyist was Aetius Amidenus, so called from Amida, in Mesopotamia, the place of his birth, whose judicious epitome of Galen's writings has come down to us in tolerable order, through the hands of a translator. In this work occurs the first description of the *dracunculus*, that extraordinary worm in the flesh, since known by the name of *vena medinensis*, from its frequency about Medina, the most respectable city of Arabia.

Of a still superior character was Alexander Trallianus, a native of Tralles, in Lydia, whose reputation in his life-time was of the superlative kind, and whose orderly and perspicuous works raise him above the ordinary class of Galen's ancient disciples.

It may be thought a sort of extraneous honour to medicine, to mention the names of Leonides, Theodorus Priscianus, and Eunapius the historian, who are remembered for literary acquirements not immediately pertaining to the profession in which they were engaged.

Vindicianus, the physician of Valentinian, of whose writings some fragments are still in existence, is celebrated as the first president of a medical college on record.

The fame of Jacobus Ppsychrestus, physician to Leo the Great, which procured statues to his honour both at Athens and Constantinople, rescues him from the oblivion, which overwhelms the names of his contemporaries.

In the history of Justinian's reign, we have an account of his physician Stephanus being sent to the Persian court, in compliment to Chosroes the Great, who demanded physicians from Constantinople, to teach in the medical college that he had founded in his royal city of Susa. For this purpose, Tribunus, another eminent practitioner, remained there a year, and at his departure had his choice of rewards, which he liberally confined to the release of a few Roman captives, but obtained that of three thousand others, prisoners in Persia, whose deliverance spread the fame of Tribunus over the empire.

At this period began the most violent and destructive plague recorded in history, which continued its ravages with little intermission from the middle of the sixth to the beginning of the seventh century. Whatever credit be given to the account, which states ten thousand persons to have frequently died in one day, in the city of Constantinople alone, it is certain, that its desolating fury has precluded any discoveries immediately relating

relating to our subject, during this long and tragical scene.

A century elapsed before the time of Paulus Ægineta, the last author of importance in the catalogue of Byzantine physicians, and particularly known as the first writer in existence on the obstetric art.

It is a violation of chronology, to add the name of Actuarius, a voluminous compiler, who practised at Constantinople after considerable intercourse had taken place with the Arabians, from whose works he transcribed many novelties relating to pharmaceutical medicine.

The faint glimmerings, which render visible the darkness overshadowing the latter days of the Eastern empire, afford no temptation to pursue any inquiries of a medical nature. The only circumstance worth remembering is the first establishment of a public hospital, which the Emperor Alexis built at the mouth of the Euxine sea, and which that extraordinary historian, the Princess Anna Comnena, declares to have



been on so large a scale, that it resembled a great town, and could scarcely be viewed in one day.

Under the influence of religious zeal, aided by the sanction of a golden bull, and the force of courtly examples, it soon became fashionable, to undertake the offices even of servants and nurses in this charitable house. How, and to what extent, this custom prevailed in after times, may be seen in the laws of almost every religious foundation in Christendom, which rank the benevolent task of attending the sick amongst their general obligations.



## C H A P. V.

## A SHORT VIEW OF ARABIAN MEDICINE.

A SUDDEN and entire revolution in the principles and political state of a whole nation seems like an event, independent of the causes that influence the ordinary succession of human affairs. Such an event, however, occurs in the history of the Arabians, whose pastoral manners were changed at once, by the resistless impulse of religious enthusiasm, to a ferocious and warlike character, almost superior to every obstacle of art and nature.

But amidst the bigotry, which imagined in the doctrines and revelations of their prophet, a perfection that superseded all human knowledge, the healing art appears to have been generally excepted from the contempt, with which they regarded other branches of science.

For

For the first and fiercest of Mahomet's successors, the victorious Omar, who in a moment snatched the sceptre from the successors of Cæsar, and destroyed in one conflagration the accumulated learning of the world, thought proper to exempt medical works from the general sentence, that condemned all other books to the flames. With their writings likewise the persons of physicians were secured from the carnage, which swept away their fellow-citizens.

The same exclusive regard seems to have descended in succession to all the conquerors and princes of the Mahometan world, who frequently treated medical practitioners, though infidels to the faith of Mahomet, with a distinction scarcely compatible with the principles of their religion, or the ordinary pride, and political severity of their manners. Indeed many Kaliphs, both of Syria and Egypt, did not scruple to elevate their unbelieving physicians to the highest dignities, and to the supreme offices of Viziers, or first ministers of state.

Of

Of the pecuniary munificence, with which medical skill was rewarded amongst Mussulmen, a singular instance occurs in the history of Gabriel, physician to the famous Aaron Al Raschid, and one of the Bactishua family, which, for it's fertility in medical practitioners, may be compared to that of the Asclepiades amongst the Greeks.

This favourite of fortune, having cured the paralytic arm of a young and beauteous Sultana, by offering a public insult to her modesty, as a stimulus to the suspended action of the limb, grew into such fame, that he monopolized the public confidence, and amassed the wealth of a prince. From his master the Kaliph he received one hundred and ten thousand drachmas in gold for his annual salary, sixty thousand for his board wages, fifty thousand for his apparel, and fifty thousand for taking care of the seraglio; besides fees and presents of great value when he was consulted, and especially for bleeding the sovereign, which he did two or three times in a year, by way of precaution. From other patients he received so much money, and so many valuables, that the treasury

treafury and wardrobe of Gabriel excelled thofe of ordinary monarchs.

From the works of Abi Oſbaia, one of their oldeſt authors, who wrote the lives of three hundred Arabian phyſicians, we learn, that the medical profeſſion was hereditary amongſt his countrymen, at a very early period. A cuſtom ſo calculated to prevent improvement, was doubtleſs one cauſe of the imperfection of their medicine, though it's peculiar and mean ſervility might be owing in part to the ignorance of thoſe, who tranſlated for their uſe the Greek writers on this ſcience.

The firſt of their medical books appears to have been a compilation in the Syriac language, made at the beginning of the ſeventh century, ſomewhat more than fifty years from the commencement of the He-gira, by Aaron, a chriſtian prieſt of Alexandria, from a Greek work called the Pandects of Medicine. It was two hundred years afterwards, before they got poſſeſſion of the works of Hippocrates and Galen, which were brought to Bagdad, with thoſe  
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of Aristotle and Euclid, by the christian Honain, whom the reigning Kaliph had sent to the west in search of learned books.

The first of their authors, with whose works we are acquainted, is Mesues; who, in conjunction with Gabriel Bactishua, had the management of the great hospital at Bagdad, though he was a christian of the Nestorian sect, so prevalent at that time in the east.

In the same city flourished Rhases, a native of Persia, whose voluminous works and translations from Greek writers amounted to two hundred and twenty-six treatises, in which occurs the first mention of that important disease the small pox, the certain sources of which, like the mysterious springs of the Nile, have hitherto baffled the most scrutinizing inquiry. Rhases also first treated of the spina ventosa, and is the most ancient writer in existence on the complaints of children. He may likewise be ranked with the first introducers of chymistry to an alliance with the healing art.

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The next in point of time, but superior in reputation, was Avicenna, born at Chorasafan in Persia, and a teacher of medicine at Isfahan, the metropolis of that kingdom. This premature genius began at the early age of sixteen years, to give lectures in various sciences, and grew to such eminence, that the future ambition of his countrymen seldom exceeded that of abridging and commenting on his voluminous works.

The fire of Mahometan zeal, after spreading with unparalled rapidity over the best parts of Asia and Africa, at length extended itself to Europe, where it's fervor seems to have diminished in some proportion to the more moderate temperature of the clime:

After the conquests and final settlement of the Moors in Spain, we find that country abounding in seminaries of medical education, from which the rest of Europe was long furnished, both with practitioners, and books of the science.

Many circumstances, that indicate the very low state of general knowledge in those  
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times, particularly characterize the scanty and imperfect means of information within the reach of medical students. Of this kind is the story of Louis the XIth, king of France, being compelled to give a pledge of immense value, with a bond from one of his richest nobles, before the University of Paris would entrust him with the works of Rhafes, which he had a fancy to read.

At Seville, the centre of Mahometan power in Spain, lived the celebrated Avenzoar, who by good management preserved his health and vigour to the age of one hundred and thirty-five years.

Here likewise flourished the more famous physician and philosopher Averrhoës, denominated the soul of Aristotle, in honour of his subtle comments on that illustrious author, which formed the text of every metaphysical school in Europe, till the new lights of science obscured the glory both of the original and the copy.

Albucasis, or Alfaharavius, is the last name of repute, the style and matter of  
whose

whose remaining works display by contrast the meanest of modern medical essays to great advantage.

To Arabian physicians acknowledgments are due for some important and useful additions to the materia medica, and particularly for the introduction of senna, manna, rhubarb, and cassia, those gentle substitutes for the severe and drastic remedies of antiquity. The uncertain and superstitious nature of their chymical knowledge would make it a task of difficulty, to ascertain it's precise extent, and would scarcely repay the labour of examination.

## C H A P. VI.

THE STATE OF MEDICINE IN EUROPE IN THE  
DARK AGES, PRIOR TO THE RESTORATION OF  
LEARNING.

IN pursuing the progress of medicine, our next attention is drawn to the view of it's low and mean condition in Europe, during that intellectual darkness, which followed the destruction of Roman power, and overshadowed the western parts of Christendom, for a period of ten centuries. In the obscurity of this mental chasm, we must rest satisfied with such unimportant memorials, as better times would scarcely deign to remember.

In affigning the subjugation of reason and reflection to the preposterous authority of the Romish Hierarchy, no disrespect is intended against the pure principles of true Christianity, which have ever tended to enlighten the understanding, and humanize the  
passions

passions of mankind. But when, in the history of our art, we see this authority exerted in forbidding the study of useful authors, and substituting pretended miracles for the remedies of nature and common sense; that monopoly of learning, which gave unreasonable pre-eminence to the priesthood, may be fairly imputed to motives less honourable and disinterested, than it's advocates have generally assigned.

Indeed no censure seems extravagant for that craft, which made masses, penances, and pilgrimages, the chief articles of the *materia medica*, and the endowment of a church, or a monastery, the most infallible panacea for diseases of the human body. Nor can it be severe, to call that the most disgraceful of all quackery, which gave to the meanest of canonized and consecrated trumpery, more fanative virtues than ever were looked for in the prescriptions of the most experienced physician.

The absurdity of ecclesiastical interference in medical matters is further evidenced by many papal and synodical restrictions, to

preserve the clerical purity of those, whom the love of gain engaged in medical occupations. The single prohibition, which hindered them from any species of anatomical investigation, and forbade their presence at the opening of a dead body, was sufficient to prevent their improvement in the business they were allowed to follow, and served to throw the operative part of our art into vulgar and illiterate hands, by whom it has long been retained in the most illiberal bondage.

It would be no less painful than useless, to pursue this subject, further than to observe the failure of every attempt to evade this usurped cognizance, evinced in the lamentable fate of enquiring physicians, many of whom were punished with death, or confined in inquisitorial dungeons, under pretence of magical practices.

Turning, therefore, from one disgusting picture to another, it is a relief to contemplate our science under a different species of slavery, still disgraceful, but less inhuman and severe.

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The fluctuation of human affairs has seldom been more strongly exemplified, than in the spectacle of Greeks and Romans, learning the corrupted rudiments of knowledge from Arabian masters. But of all sciences, the art of healing submitted the longest and the most completely to the indignity of receiving impure and polluted streams, in the very place where the genuine sources were at hand.

In the south of Europe, Saracenic instructors were every where engaged in teaching an heterogeneous medicine, partly compounded of credulous tradition, and partly learnt from the most ignorant comments on the meanest translations of Hippocrates and Galen.

The Lombards, and their successors the Normans, who settled in the most fertile provinces of Italy, had each been ambitious of rendering Salernum, a city in the heart of their dominions, the centre and emporium of science. Its favourable situation made it the natural repository of all the scientific novelties, brought by returning cru-



saders from the Holy Land, and consequently the most important seminary for public education in Europe. But Salernum was peculiarly distinguished as the city of Hippocrates, though this venerable author was known there only in the base concealment of his Arabian dress.

Of the little progress of Salernitan doctors in rational medicine a curious specimen is afforded by the well-known *Schola Salernitana*, that poetical jumble of traditionary precepts, collected and dedicated by the whole College to Robert, duke of Normandy, son to William the Conqueror, who staid at Salernum for the cure of a wound received in Palestine. The frequent republication of this whimsical performance, with pompous and prolix commentaries, strongly marks the superficial character of those ages, which received it as an adequate and obligatory code of general practice.

The durable reputation of the Salernitan school, as a place of medical education, is proved by many documents, from it's foundation in the seventh century, to that  
public

public edict of the emperor Frederic the II<sup>d</sup>, in the thirteenth century, prohibiting any one to practise physic in the empire, without a licence under the Hippocratic seal of Salernum.

From the histories of succeeding emperors are to be collected many ordinances for the regulation and improvement of medicine, in the other Italian schools of Bologna and Padua, which were imitated in the rival Universities of Paris and Montpellier. But in all these seminaries, mental freedom was so much degraded by submission to Saracenic authority, that medical students were compelled to receive as oracles the barbarous works of Avicenna, whose infallibility constituted a primary article of faith.

Amongst the few names in the annals of medicine, which throw a glimmering lustre over the mental obscurity of so many generations, the first on record is that of the monk Constantine, secretary to Robert Guiscard, duke of Apulia, in the eleventh century, who compiled a medical work for the use of his countrymen.

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The succeeding age furnishes a more eminent medical adept in the illustrious person of John of Procida, a man of high birth and noble courage, which he signalled, both in contriving and executing the massacre of the Sicilian vespers, that severe, though just and patriotic revenge on the French invaders of his country's freedom and peace.

The thirteenth century affords a few solitary instances of genius and independence, struggling in obscurity and fear. In Italy, Petrus Aponius first ventured to publish his medical sentiments, without the Pope's leave, for which his effigy was burnt in the market place at Padua, himself having fortunately escaped the flames by dying in prison, before sentence could be executed.

About the same period, the learning of France and Germany received a new impulse from the laborious zeal of two extraordinary characters. In the former country Arnould de Villeneuve, more commonly known by his latin name of Villanovanus, made himself known by a vast variety of  
medical

medical publications, the principal novelty of which consisted in adding the mysteries of occult philosophy, and the absurdities of astrology, to the medicine of the Arabian schools. By these means his fame was extended to the remotest parts of Europe, and his advice every where sought for as the most certain and infallible of human remedies.

His counterpart, Albertus Magnus, the first literary phenomenon of Germany, left behind him in twenty-one folio volumes a similar farrago, perhaps the most enormous of human composition, in which the utmost labour to separate reason from fancy, or truth from falsehood, would be repaid by disappointment, and loss of time.

## C H A P. VII.

ON THE EARLY STATE OF MEDICINE IN  
ENGLAND.

IT would be flattering to the pride of patriotifm, to find amongst our own countrymen any exception to the reproach of general ignorance, in the dark ages we have been furveying. But truth compels us to acknowledge, that in the grofs and barbarous manners of our ancestors, there are as few veftiges of ftudy or rational inveftigation, as in thofe of the moft illiterate nations of antiquity. Nor was their progrefs in the acquisition of ufeful knowledge lefs tardy in any of it's branches, than in their medicine, which confifted wholly of pretended fecrets, or abfurd rites and incantations, practifed by the loweft and meaneft of the people.

Amongft the Britons, the Druids, who monopolized all the knowledge in exiftence,  
were



were perhaps acquainted with the medical virtues of some plants, though the most flattering accounts afford very slender evidence of their pre-eminence in the art of healing.

That there were physicians, or rather surgeons, by profession, in the courts of their princes, who had established themselves beyond the reach of English invaders, appears from the regulations in some Welsh laws, which assigned to them the twelfth place of dignity, and appointed established fees, for certain cures and operations. Thus, for a simple or flesh wound, the garments of the wounded person that were stained with blood became the perquisite of the surgeon, who was allowed a fee of one hundred and eighty pence, and his maintenance, or one pound without maintenance, for the cure of every dangerous wound. He was likewise entitled to demand twelve pence when he used red ointment, but was confined to four-pence for any ointment of common herbs.

The annals of the 12th century, furnish the earliest mention of medicine being studied



died as a science in the university of Oxford, whither the impure doctrines of the Salernitan school were imported about this æra. But it was almost wholly taught and practised by the clergy, who, like those of other countries, found it a ready road to riches and honour.

The division of these practitioners, at so early a period, into physicians, surgeons, and apothecaries, seems to have originated partly from ecclesiastical restraints, prohibiting the regular orders of the clergy from practising particular branches, which seemed discordant to their holy profession, or which required any long absence from their sacred duties.

It will appear singular, that, amongst these practitioners, the compounder of medicines should have been in higher estimation than the other classes, without recollecting that the mysteries, with which he was supposed to be acquainted, peculiarly recommended him to the superstitious reverence of the times. As an instance of this superiority, may be mentioned Richard Fitz-nigel, who,  
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from the office of apothecary to Henry the III, was promoted to the bishopric of London.

The sudden and short-lived splendour reflected on medicine in the thirteenth century, from the wonderful and solitary science of our countryman, Roger Bacon, was soon obscured by the envious jealousy of his monkish brethren, who too easily succeeded in their attempts to extinguish that light, which threatened the stability of their usurped authority over the common sense of mankind.

The immense distance between this first of our experimental philosophers, and his more immediate followers, in the career of knowledge, furnishes an humiliating picture of human intellect sliding back with rapidity from the solid ground, on which it had just gained a slippery footing, to the same dark abyss of false reasoning and arbitrary conjecture, where its powers had ever been consumed in able and superstitious trifling.

It

It would be matter both of patriotic and professional congratulation to find, in a long succession of the medical practitioners of our country, a single character upon whom the example of this enlightened friar had the smallest influence. But we are condemned, through successive centuries, to accept the accidental credit reflected upon our art, from every literary accomplishment of ecclesiastical doctors.

Hugh of Evesham, better known under his Latin name of Hugo Atratus, was promoted for skill in medicine, amongst other attainments, to the dignity of Cardinal, by Pope Martin the IVth. Nicholas de Fernehom, physician to Henry the IIIrd, was made Bishop of Durham on the same account. A bishopric was likewise conferred by Pope Paul the IIrd, on John Phreas, another English doctor, during his abode in Italy, where his classical accomplishments procured him the singular honour of being chosen to compose an epitaph for the tomb of Petrarch.

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In the works of Gilbertus Anglicus, a lay practitioner, and the oldest medical author of England now extant, may be seen a very mortifying specimen of our early medicine. But the *Rosa Anglica*, a famous production of John of Gaddefden, the most eminent lay physician of the fourteenth century, exhibits a still more disgraceful picture, far below comparison with any illiterate display of modern quackery. Nor is the credit of the science much supported, by the more respectable writings of John Arden, the first surgeon of note, from which we learn the custom that anciently prevailed, of taking bonds from patients to secure payment, if a cure were effected.

In the humorous, poetical description of an old English physician, left us by Chaucer, we behold a pretty exact counterpart of the astrological and conjuring doctors of later times, whose appurtenances of magical and magnetic signs, have wonderfully succeeded in exciting the thoughtless applause of ignorance and credulity. Nor is the urinal which enriches the portrait, a bad emblem

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of the mystery of some more cautious impostors, who, under pretence of particular and exclusive penetration, have gained a better sort of notice, whilst they merited only correction and contempt.

MEMOIRS OF MEDICINE, &c.

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B O O K IV.

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ON THE PROGRESS OF MEDICINE,

FROM THE

RESTORATION OF LEARNING

TO THE EIGHTEENTH CENTURY.

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B O O K IV.

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## C H A P. I.

OF CIRCUMSTANCES CONDUCTING TO THE IMPROVEMENT OF MEDICINE, ABOUT THE TIME OF THE RESTORATION OF LETTERS.

THE reviving taste for letters, which distinguished the 15th and 16th centuries of our æra, has been aptly compared to the slowly rising dawn, that gradually dispels the shades of night. But the most vigorous beams of science have not yet penetrated through all the obscurities of intellectual darkness, though they have sufficiently illuminated the face of medicine, to afford a more pleasing view of it's surmounting the thickest clouds of prejudice and unreasonable authority.

It would be superfluous, to repeat the well known circumstances, concurring to excite

a public passion for the literary stores contained in Greek and Roman authors, that had lain for ages in oblivion and neglect. No sooner was the wholesome influence of this passion visible in the growing health and vigour of general learning, than it spread with rapidity amongst the teachers and students of the healing art, urging them to the study of those original writings, from which it's best rudiments have ever been drawn.

This enthusiastic emulation, originally communicated to Europe by the fugitive Greeks, retreating from the enemies of the Christian name, was for some time confined to Italy, where, of course, are to be found those eminent physicians, who stand first in the class of modern reformers.

But here the progress of our narrative must be delayed, to confess the obligations of our art to those distinguished personages, who, by their liberal encouragement of learned men, consulted the happiness and comfort of mankind. Honourable mention is particularly due to several princes of the Medici family, who, amidst their bounties  
to

to general science, allotted handsome stipends both to teachers and students of medicine in the various seminaries of that age, most of which acknowledged the control either of their authority or example.

In this place, likewise, must be noticed a singular and important circumstance relative to our subject, which occurred about this period of time.

Soon after the discovery of a new hemisphere, Europe was suddenly overrun with an unknown disease of such magnitude, as led to extraordinary speculations on it's nature, and extraordinary diligence in seeking for it's cure. And indeed the venereal virus, before it's specific remedy was discovered, must have been an object of great alarm, not less from the obscurity of it's source, and the extent of it's ravages, than from the peculiar and disgusting symptoms of it's progress.

In the history of a disorder, marked by such appropriate characters, it seems strange to find cause of disputation and doubt, relating

lating both to the time and place of it's origin. From the mention made by ancient authors of the evils arising from impure coition, some supposed, that it had always existed under other names, however it might have been aggravated in it's course, or strengthened in virulence by accidental combination with other depraved humours. Others sought it's fountain in the distant and newly found regions, where animal poisons were highly exalted by a favouring clime, and whence it's contagious streams were conveyed, by the numerous channels of illicit intercourse, to Europe. Such a supposition explains the phenomenon of it's blazing at once like a conflagration, spread by contending winds, in which the dazzled eye sees the flame bursting from every quarter at once.

The annals of medicine furnish an event of similar novelty and alarm in the sweating sickness, which began not long afterwards, and, though more suddenly fatal, was happily of much shorter duration than the venereal infection. This epidemic disease, which was thought to have it's origin,  
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and certainly raged with peculiar violence in England, had so quick a crisis, that it was distinguished by the name of *Ephemera Britannica*. From the best accounts, this singular fever seems to have been of the most simple, though the most acute kind; but though it prevailed more amongst the rich than the poor, and returned twice at the distance of several years, the physicians of our island never agreed upon the proper methods of treating it.



## C H A P. II.

OF THE PRINCIPAL PHYSICIANS CONCERNED IN RESTORING THE CREDIT OF ANCIENT MEDICINE.

AT Padua, which has ever been the chief medical feminary of Italy, since the restoration of letters, Alexander Benedictus first ventured to question the authority of Arabian doctors, and publicly to engage in anatomical investigations.

In the same place the venerable Nicholas Leonicens, the fire of whose professional zeal was unabated at the age of 96 years, published the first Latin translation of Galen's works. To Theodorus Gaza, his contemporary, the translator of Aristotle and Theophrastus, the medical world was indebted for the first version of Hippocrates's Aphorisms. From the same school came the Syphilis, that admired poetical description of the lues venerea by the noble Fracastorius, whose classical acquirements distinguished him

him amongst the most eminent scholars of his day.

About this period of time the manual branch of healing was much attended to, and greatly improved, especially by the lectures and publications of Jacobus Berengarius, commonly called Carpus from the place of his birth, who taught in the University of Bologna. It was likewise considerably advanced by his contemporaries Johannes de Vigo, and Marianus Sanctus, who first made public the method of cutting for the stone, called the operation of the staff, which he had learned from Johannes de Romanis, a surgeon at Cremona.

The intercourse maintained between Germany and Italy, by the frequent visits of the Imperial court to Rome, opened a quick and easy passage for the new learning into the former country, in which the scholars soon became the rivals of their masters, at least in the number of their establishments for promoting it's diffusion, at the very commencement of the sixteenth century. But to recite the names of those, who promoted

moted the interests of medicine by their labours in these seminaries, would be to compose a great work. For the immense volumes of German authors, on any subject, have never equalled in number or magnitude those relating to this science, or more strongly characterised their persevering industry, hitherto unrivalled by other nations.

In France, notwithstanding the boasted and quick genius of its inhabitants, ignorance and superstition have often been more singularly combined with superficial ingenuity, than in any country of modern Europe. Their medical reformation in particular was impeded by the most ridiculous disputes between the disciples of the Arabian and Galenic schools, after the contest was almost universally decided amongst their neighbours.

The year 1600 is disgraced by an edict of the University of Paris, which drove Dr. Peter Brissot into exile, for venturing to deviate from the established custom of bleeding in a pleurisy, or any other local disease,  
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in the arm opposite to the part affected, which was thought necessary to make a proper revulsion. That such a dispute should have become a matter of universal concern, both in church and state, no less than in the commonwealth of physic, deserves to be recorded amongst many other specimens in the history of that people, of strange national levity, contrasted with the most unreasonable bigotry and intolerance.

To make amends for former scanty memorials of rational medicine amongst our own ancestors, the name of Linacre not only stands foremost in the catalogue of benefactors to the healing art, but shines a principal ornament of literature, at the most splendid æra of reviving science. By him, this art was first wrested from the hands of ignorance and imposture, and a foundation laid for the present respectable situation of it's professors in this country. The charter of Henry VIII, dated in 1518, which incorporated the physicians of London into a royal college, and transferred to them the government and superintendence of  
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it's general concerns, was procured almost wholly by his zeal and assiduity in the cause.

Linacre was born at Canterbury about the year 1460, and after a course of studies in the University of Oxford, he went to Italy in the train of the English envoy to the Papal court. The fashion of letters, at that time in it's meridian, furnished means of gratifying his curiosity at every step. From the lectures of the classical Politian at Bologna he acquired such perfect knowledge of Latin, as enabled him to compose a grammar of it's rudiments, celebrated for perspicuity, and nice discrimination in the idioms of that language. At Florence, he had likewise the good fortune of being permitted to attend the various learned lectures, given to the sons of the Grand Duke. The good use he made of these opportunities may be collected from the suffrages of many eminent contemporary scholars, and particularly from the honourable testimony of Erasmus, that phoenix of learning, who was his intimate friend and correspondent. At his return  
home,



home, Linacre began to read Greek lectures at Oxford, and after taking his degree in medicine, was dignified with the appointment of royal physician, in which station he continued to practise, during the reigns of Henry the VIIth, and his two immediate successors, the last of which princes he likewise served as tutor in the general learning of the age.

From some circumstances mentioned of his two contemporaries, Butts and Owen, a farther idea may be formed of the consequence of physicians in that day. The former was the only man, who dared to enter the closet of that proud and capricious tyrant Henry VIII, to represent the unworthy treatment, which archbishop Cranmer was suffering from the Lords of the Council, and the name of the latter was joined with those of the highest rank as a witness to that king's will.

The most illustrious of Linacre's early successors, and almost the rival of his fame, was John Kay, better known by his Latin name of Caius, who was so great an adept  
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in ancient learning, that, in his travels through Italy, he lectured publicly at Padua, on the Greek text of Aristotle. To the College of Physicians he was a real benefactor, in many instances, and especially in providing the means of dissecting annually two bodies of malefactors, for the improvement of anatomical knowledge. But Caius served the interests of literature still more munificently, by his liberality to Gonville College, in the University of Cambridge, which has testified it's gratitude by adding his name to that of the original founder; and where the modest memorial of Fui Caius, which this learned man ordered as the inscription on his tomb, remains as an impressive memento, that even the pride of learning, founded on the only real superiority of man, stands on a basis equally unstable with the meanest vanities of his kind.

Of other medical characters at this period, little is known that deserves repetition. Caldwell merits honorable mention, for procuring from the Lord Lumley a fund to defray the expences of an anatomical lecture, which still continues to be read at the

College in London. William Bulleyne, a voluminous and verbose author, is chiefly remarkable for having suffered a long and serious prosecution, for unskilful treatment of a patient that died of a malignant fever. Thomas Vicary and John Bannister, the former surgeon to Henry VIII, and the latter to Queen Elizabeth, were likewise considerable writers, though their remaining works furnish no great evidence of real or useful progress in their art.

## C H A P. III.

OF THE ORIGIN OF MEDICAL CHYMISTRY, AND  
THE CHYMICAL SECT OF PHYSICIANS.

IT has been already said, that the materia medica of antiquity was at first wholly collected from the vegetable world, and very gradually enlarged by the addition of animal substances, and a few minerals for external use. But when excessive admiration, consequent on discovering the treasures of learning, in writers of distant times, led to the suspicion of a golden age, in which men lived secure from the ravages of disease, medical practitioners became eager to unravel the secrets of such imaginary happiness. The wonders of chymistry, at all times adapted to excite curiosity, and dazzle the eyes of hasty inquiry, were no less singularly than seasonably calculated, to confirm expectations of this nature.

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When fire was first applied to the analysis of matter, is not certainly known. Nor are the early evidences of experiments for this purpose much to be depended on, notwithstanding many voluminous compositions of credulity or imposture, which bear a very ancient date, and describe, in very hyperbolical terms, remedies capable of preserving both corporal and intellectual vigour to an indefinite extent. Hence originated the fascinating notions, that seized the minds of many ingenious physicians, and disposed them to an abated reverence for the works of Galen, which had hitherto been received as an infallible code, both of theory and practice.

The Arabian article, prefixed to the name of chymistry, denotes, amidst many other existing testimonies, the adulteration of science, by their incorporated crudities. Great part of the fifteenth and sixteenth centuries was employed by the Alchymists, in idle attempts, by combining different and inferior metals, to produce the most perfect and valuable of all.

But practitioners of the healing art were more universally captivated with this rage of transmutation, as the means of discovering the elixir of life, that infallible panacea of human infirmities before mentioned. The surface and bowels of the earth were ransacked for the purposes of this fiery scrutiny, which, though unequal to its prime intentions, gave occasion to the first use of chymical compositions in medicine.

The adventurous hands, which first found them successful in cases, where milder remedies had been tried in vain, soon applied them with an indiscriminate zeal, that overlooked those of established practice as trifling, or wholly useless. The violent and hazardous proofs of their power determined the more cautious, passionately to reject and decry their use. Thus commenced that war between the Galenical and chymical doctors, which, continuing with great acrimony for more than a century, equally disgraced both parties, obstinately bent against the confession of mutual errors.

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To those acquainted only with present improved modes of reasoning on philosophical subjects, it will appear strange to hear of men, at a period of so much comparative light, influenced by arguments of the weakest kind, on subjects, the truth of which seems easily ascertained by the exercise of common sense, and a small portion of common candour. Such, however, were many of the disputants in question, who could either admit the existence of powers in matter, incompatible with the state of humanity; or deny a progression of science, visible in the ordinary experience of life.

The aberrations of human wisdom are indeed singularly displayed in the history of alchymy, which not only exhibits the patient operator poring days, months, and years, over the crucible and retort, to extract the soul of metals, and the essence of immortality; but the divines, lawyers, and politicians of society, seriously engaged in determining beforehand the morality, lawfulness, and public consequences of individuals acquiring health, riches, and happiness, by methods unknown to their fellow



citizens. If to the extravagance of alchymical pretenders be added the audacity of their contemporaries, the Rosicrucian philosophers, and the folly of their admirers, the picture can receive no higher colouring from the most disgusting features of credulity and imposture.

Amongst the characters celebrated for ardour in these pursuits, it will not be expected, that many traces of sober and solid genius investigating simple truth can be found. In the catalogue of chymical physicians two leading names occur, that may serve as patterns of the sect, in the pristine glow of it's zeal. This *pār nobile fratrum*, Paracelsus and Van Helmont, we shall therefore join together, though by such anachronism we violate the order of history.

Paracelsus was the son of a physician in Switzerland, where he was born in 1483. In his youthful travels, having discovered the composition of some famous medical nostrums, and learnt the free use of mercury and antimony, he at once began his career  
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of a reformer, at Basle, a principal city of that country, and soon attracted public notice, not less by the novelty and boldness of his practice, than the high tone of his language and pretensions.

His extravagant zeal for novelty is whimsically displayed in the character of the invisible agent, whom he supposed the omnipotent Creator originally appointed to the task of finishing his best and most perfect work, man.

This mysterious officer he denominated Archeus, and compared him to a sculptor engaged in separating from a rude block the superfluous matter, which veils the outline and form of a statue. Thus he imagined the parts and organs of the human body lying concealed in the various articles of food, like the embryo leaves of plants in earth, till this agent of nutrition, by his skill in separation and rejection, gave them that peculiar direction, necessary to the arrangement of a human body.

In compliment to the operations of this prime chymist, Paracelsus renounced the qualities and humours of Galen, which have some colour of nature for their foundation, and instituted a new division of corporeal matter into three elementary principles of sulphur, salt, and mercury, the various appearances of which he reconciled with wonderful facility, calling that red sulphur which gives colour to the blood, yellow to the bile, and green to the fat.

To the saline matter, continually separated from the aliment, he attributed all the phenomena of health and sickness, according to it's proper or improper state and distribution over the body, making it the ground of a specific practice, long prevalent in medicine, depending on the notion of chymical combinations and decompositions. Thus every thing contrary to acidity obtained a place in the *materia medica*, amongst which, alkaline and testaceous substances, from their real powers to act on the juices of the stomach, and alimentary canal, still hold a considerable rank.

Similar

Similar credit is due to Paracelsus for proving the safety, if not for wholly introducing many other powerful remedies, which selfishness, bigotry, or timidity, strenuously and unreasonably opposed. But on this, or any other ground, it is impossible to excuse his preposterous vanity in arrogating to himself the monarchy of medicine, or his assurance in pretending to an exemption from all pain and disease, and even the power of death itself. Of such presumption his short life was the severest reproof, whilst the charge of insanity may be urged against his childish assumption of high titles, and the founding appellation of Philippus Aureolus Theophrastus Paracelsus Bombast ab Hohenheim, which he commonly used instead of his more humble family name of Hochener.

For pre-eminence in the jargon and subtleties of chymical medicine, as Paracelsus may be reckoned the Aquinas, so Van Helmont may be called the Duns Scotus of the art. Like his prototype, he thought himself destined to reform and perfect the mistakes and deficiencies of former ages. After trying

trying his skill in religion, where his warm imagination and fervent zeal soon hurried him into all the depths of metaphysics and mysticism, he was determined to the study of medicine by a dream, in which he fancied himself assured of supernatural assistance.

With the insufferable conceit of his precursor, he was ambitious of embracing all the mysteries of occult philosophy, within the comprehensive scope of his aerial system. To the offices of that imaginary compositor of the human frame, to whom Paracelsus had given a local habitation and a name, Van Helmont added the constant superintendence of disease, through all the periods of human life. But the most extravagant absurdities distinguish his Archeus in this employment, where he represents him as irritated and appeased by the outward qualities of colour, shape, or smell, both of the peccant matter, and it's appropriate remedy.

His alchymical researches after the philosopher's stone, and the elixir of life, had  
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an effect which he did not foresee, by leading to the discovery of some unknown qualities and modifications in the elements of nature. The experiments of his laboratory particularly led to an analysis of that complex fluid the air, of which former philosophers were strangely ignorant; and his gas sylvestre contains the first recorded notice of elastic vapours in aerial forms.

In the higher regions of speculation Van Helmont may be called the father and prince of modern enthusiasts, as he soared beyond all his predecessors, and bequeathed to posterity a plentiful fund, which every possible variety of religious and fanciful reveries has not yet been able to exhaust.

That the practice of this eccentric physician must have been singularly bold, appears from the multiplied testimony of his contemporaries, that his patients were generally cured or killed in two or three days. And it was perhaps on this account, as well as for his heterodoxy in matters of faith, that the inquisition drove him from Brussels, the place of his birth, into Holland, where



he died in the year 1644 at the age of 56 years.

To fill up the chasm between Paracelsus and Van Helmont, stands the name of Cardanus, who to all the absurdities of the chymical sect added the private vices, which degrade human nature.

The strange medley of abused learning, contained in the ten folio volumes of this author; may be regarded as one of the causes, which tended to lower the credit of the chymical physicians, and reduce them to the necessity of a compromise with their antagonists, ending after many struggles in that consolidation of the old and new practice, which has been perpetuated to the present day.

## CHAP. IV.

OF THE ADVANTAGES ACCRUING TO MEDICINE,  
FROM IMPROVEMENTS IN ANATOMY.

THE blind admiration, with which Galen's works were received after the restoration of learning, had generated the extravagant opinion, that nothing could be added to the sum of his discoveries in the œconomy, or diseases of the human body. But the boldness of the chymists, who first ventured to question his authority on any subject, paved the way for more liberal and natural sentiments, which soon appeared in the freedom of anatomical studies about the commencement of the sixteenth century.

The principal demonstrator and teacher of human anatomy at this period was Jacobus Sylvius, a professor at Paris, many of whose pupils carried with them an extraordinary enthusiasm for anatomical investigations, into the various countries of Europe.

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The most eminent and meritorious of these scholars was Andrew Vesalius, the descendant of a long line of medical ancestors, who had flourished in the polite courts of the Dukes of Burgundy. This illustrious man was born at Brussels in 1514, and made such progress in medical studies, that he was chosen professor in the university of Louvain, before he had attained the age of twenty years. Thence he attended the emperor Charles the Fifth in his expedition against his rival Francis the First, in which service he gained such reputation, that he was solicited to give lectures in various universities of Italy. Before his thirtieth year, he published his well known anatomical plates, drawn from the life, which deservedly entitle him to be reckoned the founder of rational anatomy.

By indefatigable exertions, Vesalius finally established the custom of dissecting human bodies, in preference to those of brutes. To accomplish this purpose, the difficulties he had to surmount, and the vexations he suffered, form a curious and interesting part in the history of his life, much of which was  
spent

spent in counteracting the opposition of prejudice and religious bigotry. The dead bodies, which he procured, with infinite hazard, from gibbets and church-yards, he was compelled to hide in his chamber for weeks and months together, never daring to examine them before the dead of night.

Yet notwithstanding all his caution, he was represented as a sacrilegious monster, devoid of Christian faith and principle, and only escaped by his interest at court from the extreme effects of superstitious tyranny. Being condemned to the flames by the Inquisition, under pretence of having opened the body of a Spanish grandee, before the last spark of life was extinguished, the power of King Philip was exerted, to procure a commutation of this dreadful punishment, for a pilgrimage of atonement to the Holy Land, in returning from which, the unhappy anatomist perished by famine, after a shipwreck on a small island on the Grecian Archipelago.

The example of Vesalius gave a quick and powerful impulse, which produced  
many

many and important discoveries in the structure and physiology of the human body. Realdus Columbus, his disciple, presided in the anatomical chair at Padua, and by his examination of the valves in the heart, proved the impossibility of the blood's reflux, according to the ancient and universal opinion.

The circuitous passage of this fluid through the lungs was likewise demonstrated by the unhappy Michael Servetus, the celebrated martyr of Calvin's sanguinary zeal. As such a discovery obviously led to the suspicion of the greater circulation, it is probable, that this extraordinary man would have arrived at this conclusion, and might have escaped the horrors of his fate, had not the infatuating spirit of the times tempted him to more speculative and subtle enquiries.

Gabriel Fallopius, a professor of Padua, first observed the tubular structure of those appendages, formerly called the horns of the uterus, and by this discovery laid a foundation for the theory of oviparous generation.



neration. The name of Bartholomew Eustachius, another Italian, is perpetuated by those accurate anatomical publications, in which was first described the interior disposition of the cavities; where the auditory and olfactory nerves are expanded, and especially that tube (called Eustachian) which opens a communication between them. Their countryman Cæsalpinus discovered so much relating to the blood's motion, that it has been doubted, whether he did not entertain some indigested opinion of it's passing in a regular course through the whole system of vessels.

The zeal for anatomical studies, which had been kindled by Vesalius in his repeated visits to Italy, was soon communicated to more northern climes. In Holland, Peter Paaw re-published the works of this great master, and was the first who projected and formed an anatomical museum. At the same time Caspar Bartholin made anatomy fashionable in the north of Germany, whilst the elder Riolan was carrying it to great perfection in France.



## C H A P. V.

A MISCELLANEOUS CONTINUATION OF THE SUBJECT, TILL THE TIME OF HARVEY.

THE improvements in anatomy, added to the union of Galenical and chymical science, formed a basis for a more complete and useful medical system, than has yet been exhibited in our history. In our farther progress, it remains to enumerate some of the most eminent supporters of this system, who may be called the eclectics of their age.

But it will first be necessary, to observe the speedy change in manual medicine, consequent on the new and fashionable modes of studying human anatomy. From the consistent form given to it by Hieronymus Fabricius, surnamed Aquapendens, from the place of his birth, who succeeded Fallopius

pius in the anatomical chair of Padua, this eminent physician gained the appellation of the father of modern surgery, and was honoured by the Senate of Venice with the Order of St. Mark, accompanied with a golden chain, and an annual pension of a thousand crowns. Nor was it much less improved in Germany by another Fabricius, called Hildanus, from Hilden, in Switzerland, where he was born, whose numerous works on every branch of our art well deserve the reputation they have so long enjoyed.

In proceeding with names of considerable importance in the science, we must still look to Italy, where Victorius at Bologna, with Fumanellius and Montanus at Verona, were distinguished as the prime authors and teachers of their age. Victor Trincavellius, of Venice, is remarkable for having gained yearly by his practice three thousand pounds sterling, an enormous sum at that time. But his fellow-citizen, Alexander Maffaria, deserves more honourable mention, for employing the produce of his labour in the most extensive charities, being

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accustomed

accustomed every week to give a portion of bread to one hundred poor people, with a dinner, and gratuities in money, on several festivals and holidays in the year.

The name of Sanctorius will be long remembered for his treatise *de Medicina Staticâ*, containing the most curious examination of cutaneous secretion, and it's proportion to other evacuations. Baptista Coretesius, a Bolognian physician, who, by force of genius and love of learning, raised himself from the lowest to the highest rank of life, may be mentioned as an encouragement to diligence and perseverance. Marcus Aurelius Severinus, anatomical teacher at Naples, amongst other works left an original one on abscesses, including a minute account of every tumour in the human body. The same period is distinguished by the formation of botany into a regular science, by Prosper Alpinus, a medical teacher at Padua.

In France, under the princes of the house of Valois, physicians seem to have been caressed and rewarded more than at any other period. Des Jardins, better known  
under

under his Latin name of Hortensius, was the favourite of Francis the First, and by his extensive practice acquired great consequence and vast riches, as did Vidus Vidius, an author and practitioner of great repute, who served the same monarch.

Their importance, however, was greatly eclipsed by that confidential physician of Henry the Second, Fernelius, who has a high claim to distinction amongst the institutors of rational practice; though his system of pathology, which he had the gratification of seeing established over most parts of Europe, be forgotten.

In the attachment of Charles the Ninth, the brutish son of that monarch, to his enlightened surgeon Ambrose Paré, we have a singular and solitary instance of medical credit, averting that miserable fate, at the infamous massacre of St. Bartholomew, which no other claims of public or private merit, nor any connexion of friendship, interest, or blood, were able to prevent. The account of his brother and successor, Henry the Third, the last of his race, at-

tending the daughter of his physician Duretus to her nuptials, and of the magnificent presents which he made in honour of her father's merit, furnishes another proof of high distinctions, unusual in the later annals of medicine.

The professional zeal of Andrew Laurentius, physician to Henry the Great, was evidenced by many publications, and particularly by his liberality in founding the first medical professorship in the university of Montpellier. Citesius, a provincial practitioner, gave the earliest account of the endemic colic of Poictou, afterwards so extensively and fatally known in other parts of Europe.

The works of Lazarus Riverius contain ample specimens of useful practice, though his name has been oftener repeated for his mode of administering what is called the saline draught. Renatus Moreau, who signalised himself by his comments and translations of Greek authors, was at the superfluous labour of re-publishing the Schola Salernitana, with all it's ancient glosses.



glosses. From Baillou, an industrious and careful collector of facts, relating to the general state of medicine in those times, we are acquainted with the prevailing style of medical prescriptions, which were frequently written in a medley of Greek and Latin, so interwoven, that it was almost difficult to determine, which of these languages was intended to predominate. But the most voluminous and indefatigable medical author of that day, in France, was the younger Riolan, a Parisian doctor, the very perusal of whose works would employ no small portion of an industrious life.

In Spain, it is no wonder, that the influence of national bigotry retarded the improvement of medicine, as it did that of other arts. The Spanish physician, most eminent at this æra, was Amatus Lusitanus, a voluminous author, and the supposed inventor of bougies; who became remarkable by abjuring Christianity, and turning Jew at Theſſalonica, to which place he fled from dread of the Inquisition.



A treatise on the management of fevers, by Brudus, a Portuguese of that day, who had been some time resident in England, contains a singular exemption in behalf of our countrymen, whom he represents as unable, from their habits of good living, to bear the strict and abstemious regimen practised amongst other European nations.

The merit of German physicians at this period must have been very great, if it be rated in any proportion to the number and ponderosity of their works. Amongst many successive names, that live in bulky folios, the most prominent is that of Horst, a medical family, which threatened to monopolize the honours of the profession. One of them, named Gregory, was reputed the German Esculapius. Another subjoined to his ample productions a manual of devotion for the faculty, with forms of prayer suited to cases of peculiar difficulty. The physician Gesner added to immense writings on medicine many volumes of natural history, which fairly entitled him to be called the Pliny of Germany. In similar books are preserved the memories of many others, whose  
indiscriminate

indiscriminate diligence loses the praise, which a more sparing and judicious selection would have ensured.

In the midst of such names, that of Fœsius, a physician of Metz, is preserved in a sort of classical security, by his excellent edition and translation of Hippocrates. A good style, and unusual conciseness in a German, has likewise rescued Jodocus Lammius from the gulf, that has involved so many of his countrymen in oblivion. Daniel Sennertus, the son of a shoemaker at Breslaw, claims a similar exception, both on account of his many candid and well-ordered works, and of the political virtues and talents, which raised him from the lowest station, to the prime honours and dignities of his country.

To our former accounts of the state of medicine in England, towards the end of the 16th century, we have little to add, except what relates to the protracted disputes between the Galenists and those of the chymical sect. Dr. Thomas Mouffet, a physician of the first eminence, was the  
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avowed

avowed champion of the latter, as may be seen in his celebrated apology for chymical practice. But he distinguished himself to better purpose in the pursuits of natural philosophy, in which he was associated with Dr. Thomas Gilbert, to whom Queen Elizabeth granted a pension for carrying on his experiments.

From the medical work of Philip Barrow, dedicated to the great Lord Burleigh, we are furnished with a tolerable specimen both of the imperfect state of our art, and the style of writing peculiar to that day. As it was one of the first medical compositions in the English language, it's author apologizes for venturing to trust his ideas to words perpetually liable to change, and become obsolete by neglect. And here may be observed the great advantage, which the ancient classics derive from a language, fitted and enriched by long use to be the perfect image of thought, and destined by accident to remain for ever and unchangeably the same.

In

In the reign of James the First, our annals are disgraced by the survival of chymical quackery, abundance of which is to be found in the works of the celebrated Sir Theodore Turquet de Mayerne, who, being driven from Paris by the predominant party of the Galenists, found wealth and honours in the court of England. More respect is due to the name of Gulston, the founder of an annual lecture on pathology, which still continues to be read at the theatre of the Royal College in London.

But this æra, however unimportant in medical annals, must be reckoned of the first importance in those of general science, and particularly honourable to our country, where that new father of philosophy, Lord Bacon, first taught mankind the direct and certain road to the temple of knowledge. To this great genius the healing art has especial obligations for many useful lessons, that point out the only sure means of improving it, by a practice founded on the observation of nature, and the infallible deductions of certain and approved experience.

## C H A P. VI.

OF THE DISCOVERY OF THE CIRCULATION OF  
THE BLOOD, BY THE ILLUSTRIOUS HARVEY.

THE obvious proofs of the blood's circular motion have made it matter of surprise, that a truth so apparently self-evident should have remained so long unknown. But if the many examples of similar oversight in human wisdom scrutinizing into the mysteries of nature be recollected, no question will be made relative to the merit of that discriminating and patient genius, which first fully conceived, and finally demonstrated the perfection of this most important of all processes in animal life,

William Harvey's first idea of the circulation has been traced to the year 1616, though he did not venture to speak publicly on the subject, till, by a long and careful examination, he had convinced himself, that



that the blood actually passed over the whole body, in an uninterrupted and circular course. He divulged his discovery in 1620, at the lecture founded by Lord Lumley, in the College of Physicians; but waited patiently for public and private objections to his opinion, till 1628, when he published it from the press at Franckfort, at that time the principal literary market of Europe.

The excellence of Harvey's character appears in the principal events of his life. He was born of respectable parentage, at Folkstone in Kent, on the first of April 1578, and died on the 3d of June 1658, having lived to see the universal acknowledgment of his discovery, and to receive the general respect due to a public benefactor of science. The liberality of his sentiments is evidenced by the unassuming modesty of his pretensions, and the patient dignity, with which he bore the injuries done to his fortune, and the cruel destruction of his last professional labours, by those political zealots, who disgraced themselves, in revenging on him the errors of his royal master.

The



The fidelity, with which he so long served the unhappy Charles, as his confidential physician, is indeed an amiable feature of gratitude, for the encouragement that monarch afforded to those anatomical investigations, which, besides his prime object of the circulation, engaged his ingenuity in reforming the old and inconsistent theories of conception, and finally succeeded in establishing that of oviparous generation.

But not content with dedicating the labours of life to the improvement of his profession, Harvey was anxious to provide for it's permanent honour, when he could no longer share it himself. With the emoluments of his practice, he built and furnished a public library and museum in the College of London, and with a singular regard to posterity, bequeathed his patrimonial estate, as a fund for a festival to commemorate every eminent improver and professor of the science which he loved.

The discovery of the circulation, having surmounted all remains of prejudice, and illuminated the greatest obscurities of physiology,

fiology, was soon regarded with a sort of public enthusiasm, as the *ne plus ultra* of human invention. The extravagant expectations which it afforded, of a short and certain method of renewing the ever-rolling tide of life with fresh and youthful supplies, led at first to the vain hope of protracting human existence beyond all former bounds. But the futility and ill effects of transfusion, soon proved the presumptuousness of attempting to dispense with those invariable laws, by which this existence is maintained and continued to the period of its original destination. The failure of these attempts is amply compensated by the clearer views it has given of health and sickness, and the rational modes which it indicates, of treating the most frequent and dangerous diseases of suffering humanity.

The time of this important discovery was remarkable for the increase and diffusion of philosophical knowledge, which included many new and curious speculations on animal economy. Thus experiments relating to the general laws of motion, and mechanical forces, were applied to the  
powers

powers of the human body, which the patient vigour of genius was exhausted in comparing to an hydraulic machine. But here again it was soon found, that any imagined proportion between the action of pulsating vessels, and the resistance of the fluids which they propel, neither accorded with such calculations, nor pointed out any practicable methods of restoring the lost balance of the constitution.

## C H A P. VII.

OF THE IMPROVED THEORY OF BILIARY SECRETION, AND THE IMPORTANT DISCOVERIES RELATING TO THE SYSTEM OF ABSORBING VESSELS.

THE theory of circulation, by transferring to the heart and it's vessels the office of making blood, left that great viscus the liver an object of new speculation. It's former importance, as the sole organ of sanguification, had made it's real use in separating the bile appear of very little and secondary consequence. But the great and indispensable uses of this fluid could be no longer over-looked, when it became known, how large a portion of the body nature had allotted for it's preparation.

Dr. Francis Glisson, an author of prime ingenuity, both in metaphysical and natural science, demonstrated the complete and rational physiology of bilious secretion, at

no great distance of time after Harvey's discovery. In the anatomical examinations which brought him to this conclusion, he likewise first observed that irritability of simple fibre in the human body, which many successive theorists have extended to the extreme scale of human inquiry, by making it the *primum mobile*, or first faculty of animal life.

Besides other medical writings, Glisson gave the first regular account of the rickets, a disorder said to have been endemic in England at that period.

The ancient doctrines of digestion, which supposed the aliment to be conveyed through some secret channels, and converted into blood in the liver, came soon afterwards into question. In investigating this subject it fell to the lot of Thomas Bartholin, physician to the King of Denmark, who ennobled the family of this zealous anatomist, to discover by his injections the lacteal vessels, so admirably calculated for carrying on this process, and conveying the nutritive chyle in a direct course to the blood. To him  
likewise

likewise appertains the honour of having first explored another and more extensive circulation of that thinner fluid the lymph, separated and deposited by the blood, in every cavity of the body, to preserve the moving parts from the destructive effects of friction.

The completion of these discoveries was reserved for John Pecquet, a Frenchman, who not long afterwards observed the union of the lacteal and lymphatic vessels, in one common trunk, the thoracic duct, which distills with uninterrupted regularity the supplies provided by nature for the waisting tide of life.

Thus have we seen, in the course of half a century, the most important functions of animated being, mysterious and unknown to the wisdom of antiquity, elucidated and rendered plain to the most common capacities.

When such inquiries were in fashion, it cannot be supposed, that the brain and nerves would escape the general scrutiny of the



times. But the subtile mechanism and operations of these refined parts of organization, which have hitherto eluded the closest inspections of human ingenuity, are probably intended as the ultimate bounds of it's exercise.

The attention bestowed on them did not, however, prove wholly unproductive, as in these examinations the course and expansion of the olfactory nerves were first pursued through the membranous lining of the nostrils, by Conrad Schneider a German, and the various bony cavities of the face, intended by infinite wisdom to improve the modulation of the human voice, were traced through all their tortuous mazes by our countryman Highmore.

## C H A P. VIII.

SOME ACCOUNT OF SYLVIAN MEDICINE, FOUNDED  
ON THE THEORY OF MATERIAL AND MANIFEST  
CAUSES.

IN the course of our narrative, it has been frequently necessary, to observe the influence, which fashionable philosophy has had on the healing art. We have once more to see it following the changes, that took place on the destruction of Aristotle's authority, which had continued paramount in every school of science, for two thousand years.

At the beginning of the 16th century, Copernicus first ventured to call in question the infallibility of this oracle, by proposing his new theory of the mundane system, which had to struggle with every kind of bigotry and prejudice, for more than a hundred years, before it obtained the assent, which it's merit deserves. It's establishment, how-

ever, did not wholly annihilate the atomic theory, which was in part revived by Gassendi, and expanded by Descartes into the most sublime and aerial speculations.

The vortical successions of the Cartesian philosophy, so aptly illustrated in the fermentation of vegetable juices, were soon applied to confirm those chymical systems, which had already introduced a sort of constant opposition between remedies and diseases. The acidity, adopted by the first chymists as a principal source of morbid affection, was now extended and supported by every possible analogy, drawn from the varieties and changes observed in the fermentative process, and lentor and alcalescency of bodily humours were admitted as causes, with the same want of demonstration, that had too long allowed the use of vague and indefinite descriptions.

Correctors of these imaginary vices were of course exalted into universal remedies, and supplied every intention of cure, except that very extensive one, which was insi-  
and

tuted to expel, through the innumerable outlets of the skin, such obstinate juices as resisted all medicinal correction, or the fæculencies that remained after a complete depuration of the body. With this last view was established a stimulating and sudorific practice, that consisted in doing violence to nature, and could not fail, when carried to extremes, of increasing the mischiefs it meant to remove.

This system, which was properly called that of material and manifest causes, was promulgated with great applause, from the University of Leyden, by Francis de le Boe, more commonly known by his Latin name of Sylvius, who continued for many years the medical oracle and teacher of Europe.

But Sylvian medicine exhibits the last bright glimmering of the chymical sect, which had many powerful antagonists in various parts of Europe, as appears at large in the entertaining letters of that lively and learned Frenchman Guy Patin, whose an-

tipathy to chymical physicians is whimsically displayed in perpetual invectives against their favourite medicine, antimony; the indiscriminate use of which had excited in many honest practitioners a degree of horror, not easy to be conceived by those, who are acquainted only with it's more innocent and salutary effects.

In censuring the errors of the Sylvian, or indeed of any medical system, it becomes necessary, to caution inexperience against the hasty conclusions, that so readily apply to the characters and conduct of their supporters, and diminish the credit, which their general candour and practical moderation really deserve. Young practitioners should likewise be reminded, that, in spite of mistaken art, nature is often able to expel morbid matter in the safest and most effectual manner, and even to accommodate her purposes, to the plans of her erroneous guide.

But leaving the bigotted votaries, and no less bigotted adversaries of medical systems,  
we

we proceed to enumerate those prudent and cautious physicians of the age, whose discoveries or useful observations have contributed to the real improvement of medicine.



## C H A P. IX.

A PROMISCUOUS ACCOUNT OF MEDICAL CHARACTERS CONTINUED TO THE TIME OF SYDENHAM.

AMONGST the countrymen and contemporaries of Sylvius, singular honour is due to the name of Nicholas Tulp, of Amsterdam, who, in addition to great professional industry, distinguished himself in a political capacity, and, by his prudent courage as a magistrate, saved that capital from destruction. To Piso, who attended Prince Maurice to Brazil, and wrote a good natural history of that country and its productions, our materia medica is indebted for that valuable drug ipecacuanha. Regner de Graaff, a practitioner at Delft, by applying the microscope to anatomical subjects, led the way to the most minute investigations into the structure and physiology of the human body.

But

But of all the Hollanders of his time, John Anthony Vander Linden, of a family demanding respectful mention in the annals of medicine, has a principal claim to distinction, both for his valuable translation of Hippocrates, and his very accurate biographical catalogue of all the medical writers upon record.

In turning to Germany, we behold the industry of it's scholastic physicians unabated during the 17th century. Bohn, a professor at Leipzig, greatly improved the anatomical, and Scultetus much enlarged the surgical part of our science, whilst Glauber and the elder Hoffmann were refining the chymical branch. Practical medicine was augmented and methodized by Etmuller, whose name is familiar by the abridgement of his great work translated into our language. Mercklin, a physician of Nuremberg, republished and enlarged the medical histories of Vander Linden.

In the northern kingdoms of Europe, medical studies were brought into great  
fashion

fashion by Olaus Borrichius, a teacher at Copenhagen, who employed an ample fortune, gained by his profession, in founding a medical college, with pecuniary endowments for the support of poor scholars.

The same emulation, which originally made Italy the leader of Europe, continued to pervade that country. Marcellus Malpighi, physician to Pope Innocent the XIIth, is celebrated as one of the most accurate anatomists on record. He was likewise the first who unfolded, by microscopic observations, the hidden structure of the vegetable world. His rivals in natural history were Redi and Bellini, physicians at Florence, who maintained the highest rank amongst their learned contemporaries. Sebastian Badus, a Genoese, first made known the specific power of bark in agues, which was accidentally discovered by its good effects on the Countess of Cinchon, the Spanish viceroy's lady.

Of the medical characters of this age, in our own country, the most singular was  
Sir

Sir Thomas Brown of Norwich, the eccentric author of the *Religio Medici*, a performance much talked of, at that day, notwithstanding it's general irrelevancy to medical subjects, resembling more the loose confession of a sceptical philosopher, than the religious creed of a physician. But his great work on the detection of vulgar errors was of a more useful and substantial kind.

From the oblivious gulf, which contains many eminent contemporaries of Brown, the claims of philanthropy rescue the name of Hodges, whose patriotic and solitary courage emboldened him to remain the only physician in London, during the whole course of the great plague, of which he lived to give the best and only authentic account that is extant.

The classical accomplishments of Willis, displayed in his accurate essay on fermentation, a subject intimately connected with the fashionable theory of his times, will ever secure his reputation from the fate of  
more

more vulgar and incoherent speculatists. A similar exemption will be extended to his friend and disciple Lower, for his systematic treatise on the human heart, notwithstanding the suspicions, that would attach on his long and obstinate perseverance in the practice of transfusion.

But of all adherents to the cardiac and alexipharmic doctrines of the Sylvian school the most sober and discreet was Thomas Morton, whose excellent practical works on fever, prove him to have been an attentive observer of nature, conscientiously occupied in withholding or supplying such incitements and assistances, as her indications seemed to demand.

At the period in question, much extrinsic advantage accrued to medicine, from the labours of those philosophic characters, who united themselves for the reformation and improvement of general knowledge. But of all the founders of the Royal Society it owes peculiar acknowledgments to the truly honourable Boyle, who, in his long  
and

and unwearied search after truth, omitted no occasion of observing and making known every thing, that might contribute to the relief of his fellow creatures, suffering from pain and disease.



## C H A P. X.

## OF SYDENHAM.

WHILST the medical attention of Europe was engaged in fallacious comparisons between operations under the influence and control of a living principle in animated bodies, and the external processes of nature, unconnected with, and wholly independant of such a power; our illustrious countryman Sydenham ventured to direct his view to the signs, by which her intentions in the cure of diseases were more unequivocally expressed.

And here we may boast, that the greatest luminaries of our science, in the last age, were two Englishmen, whom it would be no presumption to compare with Hippocrates and Galen, the most illustrious of it's founders. Indeed the single great discovery of Harvey transcends in importance  
all

all the anatomical improvements, which entitle the second father of physic to peculiar respect, whilst the comparison of Sydenham to Hippocrates forms a simple parallel between the two most eminent physicians of nature.

That this assertion is not hyperbolical, will appear by recollecting, that the ancient dedicated himself to observe and describe the origin, progress, and termination of disorders, with a careful attention to every circumstance capable of elucidating their peculiarities and events, to which wise conduct the practical habits of the modern form an exact counterpart. But he adds considerable animation to the picture, by bringing into view the success of his endeavours to assist and imitate the efforts of nature, whilst we have to lament our little acquaintance with the fortune of Hippocrates's practice.

At the commencement of his medical career, Sydenham was doubtless engaged in seeking for the source and quality of diseases, in correspondence with the medical systems

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of

of his day. But his works, which exhibit so many patient histories of their uninterrupted progress, sufficiently prove his early diversion from art to nature, and tend no less to demonstrate his suspicions of the mistaken practice of his contemporaries, than his submission to the natural dictates, which prescribe a removal of obvious hindrances, prior to the excitation of great actions. In a course of such unbiassed observation, all theoretical opinions, far from taking the lead, were either judiciously arranged in their proper and secondary place, or wholly kept out of sight, not only as irrelevant to the subject, but tending to confound the clear marks of diagnosis, and the symptoms on which a probable prognostic could be formed.

On this firm foundation was grounded Sydenham's discrimination of fevers and epidemic or atmospherical diseases, which has given a stamp of excellence to his works, never exceeded by any author of ancient or modern times. Nor is less praise due to the therapeutic regimen of his institution, which, in obeying the dictates of nature, af-

fords

fords every necessary assistance, without urging her to useless or hazardous exertions.

The good effects of this system were presently seen in the improved treatment of acute disorders of every class, where, instead of the fashionable remedies, expressly calculated to forward imaginary depurations, by additional heat and increased stimulus, a safer antiphlogistic or cooling plan was adopted, tending to unload the oppressed habit, and preserve the strength of the body for real emergencies. In fevers of a definite or specific kind, such as the small pox, it's advantages were particularly obvious, as it added to the power of encouraging the very necessary means of restraining the efforts of the constitution, which are frequently too violent for the safe and effectual expulsion of infectious matter, by a seasonable and perfect crisis.

To the simplicity of Sydenham's practice the materia medica owes it's riddance of many an useless and nauseous specific. We are likewise indebted to it for a full and

final confirmation of the virtues of cinchona, in curing intermittent disorders, and of the utility and safety of opium, in allaying many of those morbid sensations in the body, which not only obstruct the removal of substantial evils, but are themselves transformed into diseases of the greatest extent and importance.

Sydenham's knowledge of the gout, his own constitutional malady, must not be overlooked, as it furnished him with many new ideas on its causes and treatment; which collected together, and exhibited in a new and uniform dress, have been received with great attention and applause in our own times.

Of the works of this excellent author an opinion should be formed, both with respect to the imperfect state of general knowledge in his day, and by a comparison with contemporary writers, amongst whom true philosophical precision was little known. Such a judgment will leave no difficulty in accounting for the language, in which Sydenham had been accustomed to speak of ebullitions  
and



and fermentations as the sources of disease. Similar considerations will likewise excuse his frequent use of many familiar and indefinite terms, which, without such allowance, would appear inconsistent and unbecoming in an author of such uncommon merit. Nor must it be forgotten, that even the system of Sydenham, approved by reason, and confirmed by subsequent experience, has in it the imperfections inseparable from medicine, and must occasionally yield to the exceptions, which sound judgment, and unbiassed observation will perpetually discover in the best general arrangements, and the most universal and extensive rules of medical practice.

Thomas Sydenham was born in the year 1634, at Windford Eagle, in Dorsetshire, of wealthy parents, and died in London, on the 29th of December 1689. In alluding to the few circumstances of his situation that are known with certainty, we may lament the want of those, which might enable  
 “ curiosity to watch the first attempts of a  
 “ vigorous mind to break the shackles of  
 “ credulity, shake off the yoke of pre-  
 Q 3 “ scription,



“ scription and dispel the phantoms of hypothesis.”

The novelty of his opinions, and the opposition of his system to that of his contemporaries, seem to have excited in some of them, a desire to represent his professional character in very false and degrading colours. It was said, that he engaged in practice without any preparatory study, or previous knowledge of medical science. But our great English biographer, who wrote the compendium of Sydenham's life, prefixed to the English translation of his works, has fully proved, that he was early, long, and seriously employed in the only regular and proper inquiries to qualify him for the important office of a physician, and by this proof, has deprived indolence of a great and pretended example, to excuse the labour of accurate reading and diligent study, necessary in experiments that must be made at the hazard of human life.

## CHAP. XI.

A GENERAL VIEW OF MEDICAL PROGRESS, FROM  
THE TIME OF SYDENHAM TO THE EIGHTEENTH  
CENTURY.

NOTWITHSTANDING the concordance of Sydenham's doctrines with those of ancient medicine, custom and prejudice had their full effects in exciting many clamorous opponents, who represented them as leading to dangerous innovations on established practice.

Many domestic cavillers added to ill-founded objections, much personal and illiberal invective against their author. The disgrace such conduct brought on English medicine was aggravated at the same period, by the absurd and thoughtless credulity of some eminent physicians, who became the avowed dupes of Valentine Greatrakes, that crafty and audacious MAGNETISER of our grandfathers.

To draw a hasty veil over this peculiar shame of our country, we proceed to mention the noisy opposition of a new sect in Germany, headed by Cornelius Decker, of Berlin, nicknamed Bontekoë, who attempted to perpetuate a systematic jargon of medical science, by an incorporation of every chymical mystery with all the chimæras of Cartesian philosophy.

We have likewise to notice the ill reception which the antiphlogistic practice met with in Italy, where the learned Lancisius, physician to Pope Clement the Eleventh, steadily maintained the falling credit of the Sylvian school. But a more sturdy opposition was excited by his countryman Portius, a writer of eminence, who made an express attack on that most important of antiphlogistic remedies, blood-letting, which he reviled as an useless and barbarous operation, unknown to ancient medicine, before the savage and bloody sports of the Romans paved the way for its introduction. Ramazzini, a professor of Padua, made a similar attempt to lessen the credit of Sydenham's

denham's system, by composing a voluminous essay on the pernicious effects of the Peruvian bark, the free and proper use of which our illustrious reformer had been the principal means of making universally known.

In the enumeration of more important characters, who had a better influence on the state of European medicine, this bigotry of Italian physicians soon appears to be compensated by the candour and uncommon merit of Baglivi, whose rapid progress in rational practice, during the course of a very short life, entitles him to the first rank of diligent and useful observers.

Similar credit is due to those French practitioners, who claim our final attention, amongst whom Peter Dionis ranks with the most laborious and correct of anatomists; Lemery and Seignette, with the leaders in rational chymistry; whilst the honest Francis Mauriceau, has the exclusive honour of giving a new and scientific form to the obstetric branch of our art.

But

But no Frenchman merits more honourable mention in the memoirs of medicine, than it's minute and accurate historian Daniel Le Clerc, whose extensive information, fidelity, and love of order, peculiarly qualified him for his arduous undertaking. Nor does it require the smallest exaggeration, to compare the judgment and diligence, which led such a man to the most obscure and remote sources, in search of every circumstance relating to his subject, with all the successful and ardent industry, that ever distinguished any historian of human science.

The meritorious labour, so often recorded in preceding notices of German physicians, was signalized in their medical progress to the last period of our inquiry. Anatomy, which continued to be eagerly cultivated in every school of Germany, received many new lights from the dissections of morbid parts by Bonetus, physician to the Elector of Brandenburg, afterwards King of Prussia, who ennobled the family of this anatomist, and raised his sons to the first dignities and offices of their country. Another physician to this monarch was John James Mangetus,



Mangetus, the diligent author of many extensive and useful medical collections, whose zeal for the honour of his profession enriched it's annals with a greater variety of biographical information, than the records of any other science can boast.

In addition to many other general obligations of our art, the chymical branch is indebted for a new constitution to the illustrious Stahl, who purified both it's language and practice from mystery and uncertainty, and instituted a philosophical mode of analysis, which entitles him to be called the father of scientific chymistry.

But the fame of all German physicians is eclipsed by that of Frederic Hoffmann, whose various and extensive accomplishments in all the learning of a great physician, joined to his philanthropic zeal in communicating his knowledge to the world, will ever ensure him a principal rank amongst the benefactors of the healing art. In addition, however, to his general and well-earned praise, Hoffmann merits the peculiar distinctions of an enlightened theorist, who  
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greatly improved medical reasoning, by the introduction and use of a regular and philosophical precision, very necessary to confine the aberrations and inconclusive results of ordinary speculation. His pathological system of spasm, besides it's evidences of careful observation, affords likewise a rational ground of doctrines, which, though imperfect in parts, seem calculated both to elucidate many arcana of disease, and suggest the most natural and efficacious modes of cure.

Much light was thrown on medical physiology in Holland, by the successful pursuits of it's anatomists, at the conclusion of the last century. Anthony Nuck, a professor of Leyden, completed the discoveries that illustrate glandular secretion. The anatomy of the human body was portrayed with accuracy and elegance unknown before, in the splendid anatomical plates and publications of Bidloo; whilst the mechanical skill of William Muys investigated, with more than ordinary success, the structure of muscles, and the phenomena of muscular motion, the physical cause of which must probably

probably remain for ever amongst mysteries inaccessible to human wisdom.

New distinctions are due to Frederic Ruyfch, of Amsterdam, whose ingenuity invented methods of preserving dead bodies from decay, and by a variety of anatomical preparations added many curious and permanent stores of information, unknown to former times. To him, likewise, pertains the honour of discovering those valves, which are of such important use, and explain so many phenomena in the lymphatic circulation of the lower extremities.

But the great name of Boerhaave, though last in point of time, must ever stand at the head of Dutch physicians, and will doubtless maintain a pre-eminent rank in medical history, as long as sagacity, diligence, and candour claim the reverence of mankind. By him, the field of medical inquiry was not only finally cleared from the accumulated rubbish of past ages, but from all the extraneous matter, which had so long encumbered what it was unable to fertilise. Nor can detraction find room to question  
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the brilliancy and purity of such a character, on account of any fallible theories, founded on the long received, though mistaken qualities of animated matter.

Every allusion, however, to the pathological system of Boerhaave is here out of place, except with a view of pointing out the source of many indefinite notions, relative to obstructions in the human body, occasioned by the lentor or viscidty of it's juices and circulating fluids, which are still prevalent amongst the modern practitioners of medicine in Europe.

Returning for the last time to our native soil, and approaching the termination of our inquiry, we have to acknowledge the merit of Wiseman, the first of English surgeons, who greatly improved, and by his judicious publications extensively diffused the knowledge of his art. Nor must that of Cowper be overlooked, to whose researches English anatomy is much indebted, particularly for the discovery of those glands in the urethra, which had escaped the scrutiny of former anatomists.

Of

Of others, who contributed to the advancement of our art, Walter Harris is known as the first English writer on children's diseases; whilst Bate, Fuller, and Salmon are remembered for their additions to our pharmaceutic store, and Grew and Lister for their attention to natural history and botany. But this last branch of science was carried to unusual perfection by their contemporary, the philosophic Ray, whose synopsis of plants furnished an example of precision, unrivalled in his own times, and only superseded in ours by the arrangements of subsequent discovery.

It affords a singular gratification of patriotic feelings, to close the catalogue of English physicians with the three great names of Radcliffe, Freind, and Mead, which would honour the records of learning in the brightest days of its prosperity.

To Radcliffe's liberal spirit and love of science the most splendid ornament of Oxford bears ample testimony; whilst his generous zeal, to enrich medicine with all the advantages of foreign culture, exhibits him  
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as the most munificent of it's patrons. But it is to be lamented, that the professional sagacity, and decisive character of such a man, should live only in tradition. Perhaps, however, the most voluminous of medical instructions never contained a more useful and impressive lesson, or more emphatically expressed the faithful result of enlightened experience, than Radcliffe's declaration; that, when a young practitioner, he possessed twenty remedies for every disease, and before the end of his career, he found twenty diseases, for which he had not one remedy.

The classical accomplishments, logical accuracy, and medical penetration of Freind, have been such frequent subjects of eulogium, that we have only to confess the obligation of our art for his elaborate history of it's progress, through those obscure periods of time, where information could only be acquired by a condescending diligence, rarely combined with great literary acquisitions, or the ordinary refinements of taste.

It would be equally superfluous, and a transgression of our proposed limits, to re-



peat the public acknowledgments, which have been so often made in our own days, to the worth and dignity of Mead, whose literary embellishments, and liberal conduct to scholars, gave unusual credit to professional ardour, and reflected a lustre on medicine, seldom transcended in the greatest external splendour of this science.

By a still longer anachronism, the feelings of individual respect dwell on the recollection of superior excellence, lost in a Warren, whose medical skill, improved and enriched by every various and cultivated talent that has claims on public confidence, was adorned and polished by as much candour and urbanity of manners, as ever gave consolation to sickness, or conciliated private esteem. But the fading breath of contemporary praise can only transmit an imperfect and fleeting memorial of that consummate art, which leaves no fixed effect behind. Of such men, the merits are too generally forgotten with their services, whilst the selfish world is at once ready to appreciate their lives of unremitting duty, conformably with it's own maxims,

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When veil'd in Death  
Their Virtues vanish, and their Fame decays.



## C H A P. XII.

CONCLUSION OF THE SUBJECT, WITH REFERENCE  
TO THE PRESENT STATE OF MEDICINE IN ENGLAND.

THE preceding review of medicine furnishes many reflections on it's limited and unstable nature, in common with other branches of finite knowledge ; whilst it's peculiar imperfection appears, in the ultimate reference of it's general principles to those remote and mysterious powers of animal life, which are placed beyond the circumscribed bounds of human wisdom. The degree of conjecture, unavoidably introduced into it by such a connexion, must ever render it's conclusions fallible and uncertain, when compared with those of more demonstrable science.

But this partial defect, is greatly compensated by the abundance of authentic facts, preserved in the records of experience,  
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as proper and rational grounds of useful practice. The bare remembrance, however, or hasty application of these facts, without judgment or comparison, having ever been inadequate to the wise ends of their preservation, every careful and conscientious observer will see the necessity of considering and arranging them, for the purposes of recollection and use. This arrangement should indeed be confined to those probabilities of hypothesis, which acknowledge both the restraints of human prudence, and the definitive sanctions of time and general consent.

Under such control, equally superior to the habits and prejudices of solitary disquisition and private experience, medical theory may be able both to remedy the disorderly negligence of empiricism, and to obviate that pliancy of analysis, which, in obedience to individual fancy, can resolve living bodies and living principles into fictions of imagination, little resembling the legitimate results of philosophic inquiries.

But the most rational and most useful of medical theories, partaking the imperfect nature of the materials with which they are constructed, will ever be liable to perversion, when, by superseding attention to nature's dictates, they give conceit to inexperience, and fill young practitioners with the conscious firmness of veteran adepts.

And here it may be safely asserted, that many aphoristical doctrines in present vogue, which treat every part of a complicated art by very general and concise forms of classification, well suited to the relish and confidence of youth, have a direct tendency, both to encourage the presumption of idleness and ignorance, and to discredit and obscure that most useful knowledge of diseases, which is acquired by minute attention to their peculiar characters, and to the idiosyncrasy and varying condition of patients, which the bold Tyro of modern practice rarely condescends to observe.

With the essential imperfections of medicine depending on it's natural uncertainty, many extrinsic, local, and temporary circumstances,

cumstances, connected either immediately or remotely with public manners, have ever conspired to perpetuate proofs of it's frequent insufficiency to the full purposes of it's intention.

A superficial view of it's present state in England discovers, amongst the most prominent of these circumstances, the defects of medical education and medical character, in many of those engaged in the profession, who having been early destined to a very important office, without any regard to previous qualifications, labour under the constant necessity of procuring their daily support, by means calculated neither to promote their own progressive improvement, nor the comfort and advantage of their patients.

But besides a very common and absurd mode of compensating medical attendance, the general inadequate remuneration of medical skill, with few exceptions in regard to eminent and superior practitioners, is another cause of it's rarity; the more surprising in a country, where industry in other employments

employments is rewarded without grudging, and men are daily enriched to excess, by occupations that require very little mental exertion, and are wholly exempted from the painful sameness of a life, passed in listening to tales of misery in the polluted atmosphere of sick chambers.

In pursuing this subject, the comparisons appear defensible, which contrast, not only the few instances of opulence, but of humble independance acquired by medical practice, with the riches that ennoble the professors of other liberal sciences, and furnish a young and unworn mercantile crowd with ample offerings for the shrine, at which all pretensions to modern greatness are confirmed.

Another local and appropriate source of defect in this island is the venality, which disposes of academical testimony on the most contemptible terms, and introduces a confusion into medical distinctions, that has long and loudly called for the hand of restraint. This abuse, however, may serve to demonstrate a sort of exclusive virtue in  
medicine



medicine, which can preserve any tolerable credit in circumstances, that would more materially affect that of other professions. For the law would lose much of it's due respect, even in judges, if it's meanest retainer could emblazon his coat with the ermines of the bench; nor would the dignity of archbishop, burlesqued by an illiterate curate, fail to disgrace the authority it was intended to support.

The advantages of universal and uncontrolled freedom, so friendly to the general interests of science, may be urged in alleviation of these complaints, for which any positive or political remedy would probably incur all the dangers and difficulties of violent or sudden changes in those established customs, which time has consecrated to public utility. But independent of real and insurmountable obstacles, neither the supineness of apathy, nor the suggestions of self-interest ought to perpetuate an eternal acquiescence in public inconveniencies, which originate rather in accident, or the more gradual influence of all-changing time, than in any fixed or unavoidable cause.

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Amongst other casual and external impediments delaying the progress of our art, which it would be the common interest to remove, must be reckoned the irregularity of public sentiment in matters of health, which has seldom been guided by reflexion, or attention to public good. And in this respect, it would be impossible to question the claims of the present age to all the honours of credulity, and the most licentious disdain of reason and common sense.

Much of this pre-eminence belongs to those of the highest ranks, whose example has it's full force on the most distant undulating circle of society, in every part of which a currency is hourly given, not only to barefaced craft and extravagant profession, but to every chimerical reverie, that ventures to imagine great and substantial effects produced by powers either not in existence, or wholly inadequate to the pretended purpose.

The slightest degree of compliance with such follies, in medical practitioners, beyond that of silent contempt, doubtless merits the  
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the reproof of treason to the true interests of that science, the purity of which it is their duty to preserve. But no censure is equal to their criminal fervility, who add to such compliance, not only the general meanness of flattery, but the baser condescension of founding professional consequence on subserviency to the vices of their patients.

To close the train of domestic obstructions to the improvement of our art, comes the subtle influence of fashion, incessantly and banefully operating on the vigour of science, in the indolent vacuity of luxury and wealth. And what can more powerfully discourage honest application to any duty of social life, than a dependance on the thoughtless caprice, that unfeelingly withdraws confidence and reward, with the same want of judgment, with which they are frequently bestowed?

In taking leave of the subject, let imagination be indulged with conceiving the utmost perfection of human medicine, by a removal of all external hindrances, and an universal prevalence of the most enlightened practice,

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and there will still remain enough of bodily sickness in the world, greatly to impede and diminish the enjoyments both of sense and intellect, through the short and feverish dream of human life.

THE END.

